

## Contents

- Abstract
- Introduction
- Organization
- References
- Simple direct textual matches
- Personality, humor, and metaphor
- The author on his work
- Rigor and precision
- Excellence
- Methods and practicality
- Biographical allusions: gambling, mining, archaeology
- Miscellaneous linguistic constructions
- Miscellaneous word choice
- Wordplay
- Conclusion
- Appendix (Tables of common thematic words).
- Appendix (Sanders' mining letter).
- Appendix (Sanders' and Erdnase's vocabulary).
- Appendix (Other reversed and anagrammatic pen names)
- Appendix (Sanders' literary allusions).
- Appendix (Sanders' authorship of Contributions to the Introduction to Historical Society of Montana, Vol2).
- Appendix (Additional photos of Sanders)
- Appendix (Sanders' height and class photo).
- Appendix (Sanders timeline - notes)
- Appendix (Sanders self description).

HTML version (preferred...no page flow breaks)
PDF version (paged)


#### Abstract

Who wrote The Expert at the Card Table? This document compares approximately 250 linguistically and thematically similar examples extracted from the writings of S.W. Erdnase and W.E. Sanders. These correspondences add additional weight to the hypothesis that Sanders wrote The Expert at the Card Table under the pseudonym (and anagram) of S.W. Erdnase. A summary of the other sources of evidence supporting the case for Sanders as the author is also presented.


## Introduction

## Prev Next Table of Contents

The Expert at the Card Table (EATCT) by S.W. Erdnase, published in 1902, has been the most influential book ever written on sleight of hand with cards. The techniques taught were revolutionary and inspired card hustlers and magicians for over a century. But the appeal of the book was always more than just the actual sleights. It was elegantly written and revealed wisdom and deeper secrets to those who read it closely and repeatedly - to those who studied it. For example, Dai Vernon, the most prominent close-up magician in modern times, revered Erdnase and fondly quoted lines such as "The resourceful professional failing to improve the method changes the moment," which he felt epitomized the subtle thinking behind so much of Erdnase's book.

Just as the book doesn't give up all its secrets easily, the author's identity has remained shrouded in mystery ever since the book's publication. The author's name of S.W. Erdnase was generally recognized as being the name E.S. Andrews spelled backwards. But no compelling candidate with that name was ever found. In 1999, David Alexander and Richard Kyle in a brilliant bit of intuition, abductive reasoning, and legwork proposed a new candidate, one who fit the known and likely characteristics of whom Erdnase must be. That candidate was W.E. Sanders (1861-1935), a mining engineer from Montanta who was educated at the Columbia University School of Mines. Sanders was the son of Wilbur Fisk Sanders, the first Senator of Montana and had every reason to keep his identity hidden. He hid it through a clever double anagram, S.W. Erdnase.

After coming up with the candidate, a good deal of biographical evidence was uncovered, first by David Alexander and later by Marty Demarest. The present document builds on that work and provides a large number of striking linguistic and thematic correspondences discovered in the process of comparing the texts of both writers. These textual correspondences substantially augment the prior evidence that Alexander, Kyle, and Demarest had already uncovered. We start by summarizing the overall evidence:

Anagrams and proper names: Sanders, like Erdnase, was clearly fascinated with many different aspects of language. His writings include the deliberate use of vernacular speech patterns, foreign terms, alliteration, puns, and other wordplay. And he even provides an etymological analysis of the name "Montana". He was also very inventive, having been granted two patents and written technical articles on mining engineering. These elements of his background help explain the genesis of his pseudonym S.W. Erdnase, a double anagram of his own name W.E. Sanders, which also spells E.S. Andrews backwards. Not only that, but "Erdnase" itself means "earth nose" in German, which is an apt description for Sanders' profession as a prospector and mining engineer. The relatively obvious reversed name (E.S. Andrews) served to misdirect away from the anagram to his actual name. This allowed Sanders to cleverly and safely "assert" his authorship of the book. And it was effective - it led to a 100 year wild goose chase of trying to track down an E.S. Andrews before David Alexander and Richard Kyle discovered the ruse. It was, to re-quote Erdnase, "the most subtle and ingenious pseudonym ever devised."

As mentioned above, the pseudonym "Erdnase" means "earth nose" in German. Like most engineers of the day, Sanders knew German - he had studied it both before and during college. He also incorporated a German phrase "aber nit" ("but not") into one of his poems.

Sanders' early diaries and notebooks provide remarkable evidence that reinforces the anagram theory. They contain examples of partial anagrams and rearrangements of the letters in his own name. For example, he plays with the letters in his name to spell out "WandersS" and "Wes Anderson." In another instance, he modifies the letters in his name to "Saunders" and places them into a 2 x 8 grid.

In addition to the anagram itself, it has been noted that embedded within the book's subtitle "Artifice RUSE AND Subterfuge" is the name "Andrews" ("AND RUSE") phonetically permuted into "RUSE AND." This is another possible clue signaling that the obvious backwards spelling of "E.S. Andrews" was perhaps a ruse, artifice, or subterfuge itself. In addition, in one of his poems, Sanders performed a similar phonetic shuffling on the name of one of his college classmates. And elsewhere he makes various puns on the names of several other college classmates. All in all, Sanders was clearly fascinated by wordplay based on names.

We also find evidence that his predilection for thinking of names in terms of their constituent letters extended well into his adulthood. In published correspondence from 1896 (while he was at the Historical Society of Montana and only a few years before he unveiled the pseudonym S.W. Erdnase), Sanders writes about the soon-to-be-adopted name for his home state of Montana: "It is a short, sightly, and simple name, and one of much euphonic beauty; one which the people of this state would not care to part with for any possible COMBINATION OF LETTERS." [L-1896] Sanders had surely noticed and was improvising on a similar characterization used by members of Congress who criticized the proposed name as "a mere conglomeration of letters constituting no word." [The Columbus journal., June 19, 1889]

In a footnote about Captin William Clark(e) to an article published by the Historical Society of Montana (1896), Sanders discusses the varied spelling of Clark's name (with and without the "e") and declares that "A similar mutation in the spelling of names is illustrated in many other instances beside this." This is yet another example of Sanders' strong and recurrent interest in names and letter combinations. And it perhaps also hints that among the "other instances" is the mutation from "WE Sanders" to "ES Andrews" to "SW Erdnase."

See appendix below for a list of other authors who have used pen names based on an anagram or reversal of their actual name.

Magic and Gambling links: There is quite a bit of evidence linking Sanders to both gambling and magic. In particular:

- He received letters related to his gambling debts.
- He refers to card games mentioned by Erdnase (cassino, whist, euchre) in his diaries.
- He used gambling slang/terminology in his published writings. These include: on the square, "make good," quit the game, faro, poker, shell game, roulette, honorable dealing, palmed off. Additional terms are found in his diaries.
- He purchased a half dozen decks of cards for a trip. This strongly suggests he was a card manipulator. Erdnase tells us why: "For superior work the cards should be new, thin, flexible and of best quality... Cards that have been handled two or three hours become more or less sticky, and the slightest friction is a detriment to perfect manipulation."
- He included details about the card trick Mutus Nomen Dedit Cocis in his notebooks.
- He wrote in his diaries about "seeing through" a magic performance.
- Aside from Marshall Smith, the illustrator of the book, the only other first-hand personal account of Erdnase came from the magician Hugh Johnston. After a performance in Denver, Johnston was met backstage by the magician Del Adelphia and a friend who he introduced as Erdnase. Adelphia was a Montana resident, and he performed in locations throughout Montana and the West in close proximity to Sanders, including Sanders home town of Helena. It is significant that the one person known to be a friend of Erdnase was, like Sanders, a Montana resident. And the meeting in Denver suggests that Erdnase was from the West, or at least traveled in the area, both true of Sanders. It is also worth noting that the sole surviving book from Adelphia's collection was a first edition copy of EATCT, which was a relatively obscure book at the time and in a different branch of magic than the stage illusions that Adelphia performed. So this serves as independent evidence of the connection between Erdnase and Adelphia and adds credence to Johnston's account. See [Demarest Montana] for more.

Motive: Sanders had a compelling reason to use a pseudonym to hide his identity as a card cheat, given that he came from a well respected family and his father was a United States Senator. There is also other suggestive evidence of Sanders hiding aspects of his identity: pages torn from diary; references to his "other life."

Personal characteristics: The book's illustrator, Marshall Smith, was tracked down and interviewed in the mid 1940s by the magician and popular math and puzzle columnist Martin Gardner. Sanders was known to be near Chicago in December 1901
when Smith met with Erdnase. While it was several decades since he had met Erdnase to do the drawings, Smith was able to remember some details. Sanders provides a good match with Marshall Smith's recollections.

Smith recalled that the author had "a name with a W." This matches the initial W in Wilbur Sanders.
Physically, Smith described Erdnase as being of slight build and between $5^{\prime} 5$ and $5^{\prime} 7$, while Sanders at age 20 was reported as being $5^{\prime} 8$ and weighing 130 lbs . Smith, himself, was a tall man, probably at least $6^{\prime}$ and remembered looking down at Erdnase. People tend to categorize other people's heights in approximate categories, and aren't particularly accurate when the height is different than their own. So it is easy to imagine Smith's 45 year old recollection being in the right direction (significantly smaller than himself) but off by an inch or two. Estimates of Sanders' actual height are examined here.

Smith also estimated that Erdnase was about 40 years old, which exactly matches Sanders' age at the time. According to Smith, Erdnase seemed to be unmarried and not from Chicago (where the illustrations were done and the book was printed) - both aspects matching Sanders. And significantly, Smith mentioned Erdnase's extremely polite, gentlemanly, and refined manner; and that he was good looking and well-dressed. These qualities all apply to Sanders' upper class background and education; and are reflected in the quality/polish of his writing and what we can observe in photos.

Erdnase mentioned to Smith that he had a family connection to the well known cartoonist Louis Dalrymple. According to Marty Demarest's research [Montana Magazine of Western History Winter 2013], the Dalrymple and Sanders families had been related since the late eighteenth centuries. And Dalrymple had also seemingly caricatured Wilbur Fisk Sanders, in one of his cartoons, as the face of Montana.

In one aspect, Sanders doesn't seem to match Smith's recollections of Erdnase, whom he described as being "blondish" and not having dark hair or eyes. However, one can infer, from Sander's humorous self-description in his Columbia class reunion bio, that he had a fair complexion with reddish hair and freckled face. (He air young an' beautifullest an' fair; he hez carroty face an' a freckled hair.) One can imagine a fair complexion with reddish hair as being conflated with being blondish after the passage of 45 years.

Writing and publishing experience: Sanders was a well-educated, polished, published writer, capable of writing at the level of Erdnase. In addition, both men had experience with publishing. Erdnase self-published EATCT. Sanders had knowledge and experience with publishing, both as clerk for his father in the US Senate, and later as Librarian at the Historical Society of Montana. He understood the limitations/problems involved in the mechanical process of getting something out, and described (in a letter) the process with respect to his Montana publication: "The mechanical part of the work leaves much to be desired, but it is something to have gotten out the work, so that we can afford to overlook such an item as that." And he elsewhere commented that "it became the duty of the present Librarian [i.e. Sanders] to carry on the work of publication to its completion. Additional manuscript was prepared and edited and the book gotten out at as early a date as possible, but it was finished, however, only after some unavoidable delays." [MHS-lib]

As noted above, Sanders clerked in the US Sentate when his father was serving on the Senate Enrolled Bills Committee. As such, he was likely involved with the preparation of the 1890 Copyright Act, which would be useful in publishing and copyrighting EATCT. In addition, Sanders was reported to be writing a book around 1900. This is possibly EATCT, given that Mine Timbering was a collection of existing articles (two by Sanders) and wasn't published until 1907.

Misspellings: Some of the misspellings in Expert at the Card Table correspond to similar spellings used by Sanders. The first three instances below were first pointed out by Marty Demarest in his articles on Sanders.

- Erdnase and Sanders used the same unorthodox spelling of the card game Cassino.
- The name of the magician "Charlier" is misspelled as "Charlies" in one location in EATCT. This could be explained by Sanders' handwriting, where he often writes the letter " $r$ " much like the letter "s".
- Erdnase misspells "stratagem" as "strategem". This could be explained by Sanders' years of studying Latin, where the spelling is "strategem."
- Erdnase misspells "sleight" as "slight" on the cover page of EATCT. Elsewhere he uses "sleight." In the same way, Sanders elides the "e" when he spells "height" as "hight" in Mine Timbering; while, in other writings, he uses "height." Although Erdnase's misspelling of "sleight" as "slight" might just be a mistake, it could be more than coincidental that it matches a very particular pattern of spelling variations found in Sanders' published writing. Sanders does a similar thing elsewhere, inconsistently using both "alignment" and "alinement."
- Erdnase and Sanders make similar spelling mistakes in French terms by using an accented "e" sound (AY - as in the long A in cAke) when none is warranted. Erdnase does this in "beté noir" (BET-AY), which should be "bête noire" (BET). Sanders mistakenly writes "coups des main" (coo DAY man) vs the correct "coup de main" (coo DUH man). In appears as though Sanders and Erdnase heard the terms or phrases mispronounced in English (as is common) and transcribed them accordingly, without knowing the correct word form and orthography. This suggests that both men shared a similar imperfect knowledge of French. See here for more examples of this type.
- In Contributions to the Historical Society of Montana Volume 2, Sanders included an errata correcting a spelling mistake, where incognita (in terra incognita) had been misspelled incognito. This could easily just be a printer's error. But it could also be a Freudian slip, revealing that Sanders regularly operated incognito under pseudonyms (e.g. Erdnase and/or Andrews) in order to hide his true identity. This possibility is augmented by the fact that Sanders makes the error in a passage describing a "venturesome life" where the "chiefest delight" is in "overcoming dangers," a close parallel to Erdnase's description of a gambler's "delight... in making the hazard."

Writing style and content: The present document focuses on the respective writing of Erdnase and Sanders, providing excerpts that illustrate side-by-side the many similarities in the language they use. As David Alexander pointed out, this involves not just common linguistic patterns but also the underlying personality and modes of thought that shine throughthe overall writing voice and related thematic concerns. One finds in both men an incisive and confident writing style, assured of its own effectiveness. There is a strong attention to detail and an appeal to precision and rigor (with frequent use of logic-oriented terms like axiom, rule, and invariably as well as technical terms like longitudinal and jog). When describing a one-handed bottom deal, Erdnase says "the IMPETUS and DIRECTION given to each card must be nicely CALCULATED," much as a physics student would think of the trajectory of body in motion after a force has been applied to it. Elsewhere, he describes how "one must have an UNDERSTANDING of the CAUSE AND EFFECT of the various actions." Sanders was a professional engineer, and the writing reflects that training and mode of thinking.

Likewise, the writings of both men manifest a healthy ego, proud of what they've achieved. Neither is shy about claiming superiority of their systems over others ("vastly superior", "far in advance of"). Both authors take delight in pointing out hypocrisy and pretense, as they sarcastically rail against so-called "professionals" and their ruses and deceptions. Using almost identical hyphenated terms and scare quotes, Erdnase and Sanders respectively mock "self-styled 'ex-professionals' " and "self-constituted 'historians' " as the producers of worthless information. They then underline the point using the same metaphor (exhuming). Erdnase refers to "EXHUMING some antiquated moss-covered ruses," while Sanders describes bogus
mining reports that are "EXHUMED from their obscure place of burial." Both menu employ a similar self-deprecating humor when describing themselves: in Erdnase's "insufferable conceit" and Sanders' "yer braggin' yet".

In addition to the actual content of the book, Erdnase's facility with language and the clarity with which he expresses his thoughts make him stand out among magic authors of his and any other time. Erdnase varies his style substantially throughout the text. The Preface, Introduction, and the first few pages of both the Card Table Artifice and Legerdemain sections most strongly represent what we think of as Erdnase's writing voice. This is where he makes especially incisive comments and exhibits his personality and mode of thought. In contrast, much of the body of the main text, describing sleights, is very analytical and precise. There are trenchant generalizations and insights infused throughout, but the main text is primarily focused on describing the mechanics of the sleights as clearly and accurately as possible. The third style is in the patter for the tricks, which has a much more oratorical flavor. All three styles, while different, are extremely well executed and integrated.

Sanders' writings exhibit many of the same attributes and qualities, but applied to a different and wider range of topics. There is much stylistic and topical variety among the following: his mining articles, which share Erdnase's precision, and attention to detail; his Columbia class reunion writing, in which he shines as a humorist in both his prose and poetry, while often presenting a more valedictory voice as well; and his studies of Montana's history (including the linguistic derivation of its name), which is presented in a leisurely and scholarly tone. It is very easy to imagine Expert at the Card Table as a Sanders treatment of yet another specialized domain, that of card table artifice, where these various stylistic strains combine into the overall voice we know as Erdnase.

The uncanny linguistic similarity between Erdnase and Sanders includes word choice, idioms, syntactic/semantic patterns, metaphors, and the underlying themes they invoke. They both take great pleasure in the nuances of language and use it in a very creative manner. Hence the frequent and varied use of puns, scare quotes, parenthetical punctuation, colloquial language ("langwidge", "Get yo' own han' "), alliteration ("wiles and wickedness", "wicked waste"), etc. In one instance they both make a pun that pivots on the same word: "shift".

Topic-wise, Erdnase and Sanders sometimes even cross into each other's domain, with Erdnase invoking mining for patter ("metals as gold, silver, or copper...prospected area") and Sanders touching on gambling themes ("Make simple faro, poker plays..."). The themes and patter of Erdnase's first two and most distinctive tricks (Exclusive Coterie and The Divining Rod) echo Sanders' background in private salons/clubs, his profession as a mining engineer, and his duties as Librarian for the Historical Society of Montana in preserving ancient artifacts and cultures.

There are some other interesting biographical hints in EATCT. For example, Erdnase describes himself in his youth as " $a$ self-satisfied unlicked cub with a fairly fat bank roll." This is an apt description of Sanders, who came from a prosperous family and attended prep school in New England and college in New York. In addition, Sanders grew up on the Frontier in Montana, and we find in EATCT a significant number images and phrases (e.g., "flush the quarry" and "trap shooter") that evoke country life.

Etymology is another shared interest displayed in their writings. Both Erdnase and Sanders go out of their way to describe the derivation and meaning of names and terminology. Sanders does this extensively in his article on Montana [MHS-vol7], in his mining articles, and facetiously in his Columbia class reunion writings. Erdnase touches on this topic several times: he explicitly mentions the derivation of the term "cold deck" and the misnomer "back palm;" and he explains the names he gave to a couple of his own sleights (Longitudinal Shift and S.W.E. Shift).

Notes on methodology. The main purpose of this document is to present relevant excerpts from Erdnase and Sanders to allow for an informed evaluation of their common authorship. Otherwise, collecting and sifting through a mass of unfamiliar text would be a daunting task. To advance that goal, the examples are organized into thematic and topical categories to elucidate how they cohere as a whole. And by detailing and comparing their internal structure (word choices, syntactic patterns, metaphorical and semantic roles, etc) it becomes easier to discern the common voice of the two authors. This is much like hearing one song that sounds like another. Listening to them side-by-side makes it possible to analyze how they sound alike (chord progression, harmonies, lyrical content, singer's intonation, or melodic contour). And, of course, one song sounding like another doesn't mean they were written or sung by the same person or even that one influenced the other, but it increases the odds. The same applies to text. And in the aggregate of hundreds of examples, the odds are increased again.

It should be noted that when performing textual analysis, literary critics and other scholars routinely identify parallel passages both within and across documents. This can be something as simple as one line of text foreshadowing another within the same work. Or it can be applied across texts. For example, it is well established that Shakespeare incorporated text from various sources into his plays. In analyzing these, the corresponding passages are compared side-by-side. The same methodology applies to any form of textual interpretation, including assigning authorship to anonymous text or infering whether two authors are the same, as we are doing here.

We do not attempt to perform a statistical analysis based on quantitative metrics such as relative word frequencies between the two authors. With a comparatively small amount of text, in disparate genres and covering various topics, a number of assumptions would be needed to normalize the data, adopt baselines, and ultimately draw conclusions. For example, Sanders' class reunion text, mining articles, and historical writings are quite different stylistically and content-wise. And likewise, Erdnase varies his writing between the Introduction, the detailed description of the sleights, and the card trick patter. These different genres and domains impose different constraints on the text and would be difficult to factor out. Furthermore, some of the most persuasive comparisons are "one-offs" or others involving semantic or thematic attributes or subtle lexical syntactic patterns, which are less ammenable to a quantitative analysis.

Also, while hard numbers and statistics might be appealing and provide the comfort of "objectivity," they are neither required nor even necessarily more objective. In addition to just trading off one set of unknowns for another, they typically restrict the scope of the analysis to simple measures such as sentence lengths or n-gram frequencies. While sometimes illuminating, these crude metrics don't capture the stylistic and semantic nuances that humans can easily discern when presented with a set of relevant examples.

One statistical tool that is useful in some cases is Google N-Gram Viewer, which provides historical data on the frequency of any word or phrase, as found in the Google book corpus. It can reveal, for example, which words and phrases were more common in the past than today or when a particular phrase is rare and only used by Erdnase and Sanders and a small handful of others. It is much less useful for partial matches of words, complex syntactic patterns, or anything related to the underlying meaning. Another pitfall is that the resulting frequencies are not normalized for genre. Finding the word "longitudinal" in a geography text would be much more expected than finding it in a love poem.

It is also worth reiterating that the textual evidence need not carry the full burden or "prove" that Erdnase and Sanders are the same person. In fact, no individual piece of evidence, such as Sanders' purchase of playing cards, toying with anagrams
on his name, incurring gambling debts, or describing a card trick is dispositive either. Instead, all these elements, together, contribute to the larger argument that W.E. Sanders was the true author of Expert at the Card Table.

## Organization

## Prev Next Table of Contents

This document presents approxiately 250 comparative examples extracted from the texts of both Erdnase and Sanders. They are broken into several sections that are organized into the following topics, themes, and modes of expression.

Simple textual matches (Section 1) - Examples extracted from other sections of this document that provide a simplified, easily digestible introduction of strict textual matches.
Personality (Section 2) - Where the authors' personalities shine through. They often exhibit a humorous, mocking, or satirical tone highighting the foibles of human nature. We also include cases where the two writers exhibit the same mode of thought in their use of similar metaphors.
The author on his work (Section 3) - Where the authors characterize their written work itself.
Rigor and precision (Section 4) - Where both authors think and write like engineers; using words like: requirements, axioms, rules...
Excellence (Section 5) - Where both authors exhibit a high regard for excellence in various domains (e.g. aesthetics, methods, and education).
Methods and practicality (Section 6) - Another aspect of thinking like an engineer, with a focus on the importance of process, systems, and methods.
Biographically salient topics (Section 7) - Where Erdnase writes about mining and archaeology (one of Sanders' interests) and Sanders writes about gambling.
Linguistic constructions and word choice (Sections 8-9) - Examples that are neutral with respect to theme or topic but exhibit the distinctive linguistic constructs and word choices common to both writers.
Wordplay (Section 10) - A persistent interest in a variety of wordplay such as puns, colloquialisms, foreign terms, and word derivations.
In the Conclusion we discuss some avenues for future investigation.
Sometimes a linguistic example would fit in more than one section or touch on more than one theme. In these cases, it is included in its most specific section, and a reference to other significant themes is made in the heading.

The Appendix includes

- Tables of word occurance counts for a variety of thematic terms
- A couple longer annotated examples: a) Sanders' 1906 letter to Mining and Scientific press that illustrates, in a single short text, many Erdnasean characteristics; and b), a paragraph from Erdnase annotated with corresponding excerpts from Sanders.
- A list of words that demonstrate the well-developed vocabularies of the two authors
- A list of other authors using anagrams or reversed pen names.
- More evidence to further flesh out Sanders' educational background with a list of the many literary allusions found in Sanders' writing.
- Textual comparisions between Introduction to the Contributions to the Historical Society of Montana, Vol 2 and Sanders' other writing.
- Some new photos of Sanders
- An analysis estimating Sanders' height as depicted in his class photo.
- Notes towards a timeline of Sanders whereabouts
- Sanders self description as appeared in his 1910 college reunion book.

Notation: About one third of the examples are highlighted with red asterisks ( $* * * *$ ). These are cases that seem particularly worth noting or otherwise more relevant than others. They are generally near the top of each section and can be read first to get a sense of the most salient examples before examining the rest. Also, within each example, a few closely related variants are sometimes included. These are usually separated from the main pairings by a blank line.

To highight the linguistic and thematic correspondences in each example, relevant words are put in UPPERCASE. In a few cases, where the textual examples are longer, color coding is used to indicate the corresponding words or thematic elements.

## References

## Prev Next Table of Contents

Sanders' excerpts are taken from the following sources (mostly available online). The source is not generally indicated with the individual excerpts except to differentiate between the different parts of the Columbia Reunion text. Sanders references are also sometimes given when the source seems worth noting in some other way. There are no page numbers currently given for Sanders' excerpts. For Erdnase, however, the page number is always indicated (for the Charles T Powner 1975 edition).

- Memoir of the summer school of practical mining June and July 1884. Wilber E Sanders (in Practical Mining. [SMR]
- The Miner 1885 [MINER]
- Sanders Masters Thesis. 1885 [THESIS]
- Letter to Brower 1896 (in Missouri River and its Utmost Source) [L-1896]
- Contributions to the Historical Society of Montana Vol 2. 1896 [MHS-vol2]
- Report of the Librarian for the Historical Society of Montana 1896 [MHS-lib]
- Contributions to the Historical Society of Montana Vol 3. 1900 [MHS-vol3]
- Mine Timbering and the Support of Earthworks in The Mineral Industry Vol 101902 [MTE]
- The Best Shape for a Shaft - in Mining and Scientific Press. April 14th, 1906. p255. (Letter: Helena, March 16, 1906).
[L1-1906]
- The Best Shape for a Shaft [different than above] - in Mining and Scientific Press. May 12th, 1906. p308. (Letter: Helena, Montana, May_2, 1906). [L2-1906]
- Reference Schemes for Mine-Workings 1906 [RSMW]
- Mine Timbering - book, edited by Sanders with two articles by Sanders 1907 [MT]
- Montana - Organization, Name and Naming 1910 - article [MHS-vol7]
- Columbia School of Mines Twenty-fifth Anniversary Reunion, 1885-1910 [CR] [CR bio] [CR poem] The [CR bio] annotation is made on excerpts taken from the biographical sketches Sanders wrote about his classmates. The information in those overall sketches was partially supplied by his classmates with Sanders usually providing his own commentary in a lead-in paragraph with additional language that framed the rest. These excerpts were only used when the language was from Sander's first person point of view, in his voice, and exhibiting his distinctive style. In addition, excerpts from his poems are indicated as [CR poem].
- "Mining Reports" (Letter) in Mining and Scientific Press, Volume 1071913 [ML1913]
- Improved Type of Ore Bin, Eng \& Min J 97:1003-4 May_16, 1914. Reprinted in Details of Practical Mining. NY: McGraw-Hill, 1916, p. 256. [ORE]
- Sanders Diaries 1875-1896. I don't have access to these. The few quotes referenced come from the Marty Demarest and David Alexander articles listed below. [DIARIES]


## Articles and resources on Erdnase and Sanders:

- Unshuffling Erdnase by Marty Demarest- Genii Magazine, Sept 2011 [Demarest Genii]
- The Magician as Detective: New Light on Erdnase by David Alexander- Reprinted in Genii Magazine, Sept 2011 [Alexander Genii]
- Montana Conjurers, Con Men, and Card Cheats. Wilbur E. Sanders, S.W. Erdnase, and The Expert at the Card Table by Marty Demarest. Montana The Magazine of Western History, Winter 3013, Volume 63, Number 5 [Demarest Montana]
- Genii Forum Erdnase thread (2003 to present) [Genii forum]
- The Gardner-Smith Correspondence. Richard Hatch, Charlie Randall \& Martin Gardner, 2007 [Gardner]

Some of the textual examples presented in this document were first pointed by David Alexander, Marty Demarest, Bill Mullins, Leonard Hevia, and François Tonneau. I make note of that if/when I'm aware of it. A few exact lexical matches were gleaned from Carlo Morpurgo's computer-generated list of common word patterns between EATCT and Mine Timbering.

## 1) Getting started: Simple textual matches

## Prev Next Table of Contents

The following set of strict textual matches provide a simplified, easily digestible introduction to some of the similarities between the two authors. It doesn't include many of the more interesting cases where word order is slightly varied or synonyms are used in otherwise roughly equivalent expressions. Nor does it include any of the various compelling metaphorical, biographical, or thematic matches. Those are all presented in later sections. These introductory examples were selected from the larger set according to the following criteria:

- Examples contain sequences of two or more adjacent words in common.
- The words must be identical, or in the instances where the words are not identical, they vary primarily only in tense or number (e.g. "make good" versus "made good" or "preclude the possibility of" versus "precludes the possibility of"). Or, in some instances, there is a single interposed word that doesn't change the core meaning of either phrase (e.g. "quite equal" versus "quite of equal" or, "particularly adapted" versus "particularly well adapted"). But in almost all of the examples the combinations of words are literally word-for-word identical.
- Short and extremely common word combinations are omitted.
- Some idioms (e.g. "once upon a time") are omitted.

Note: For easy readability, these excerpts are somewhat abbreviated. The full entries with explanatory context (including page numbers for Erdnase excerpts) can be found in the main body of this document where they are organized into various thematic or topical groupings.

Erdnase: several processes that MAY BE EMPLOYED ADVANTAGEOUSLY UNDER special circumstances. Sanders: but they MAY BE EMPLOYED ADVANTAGEOUSLY UNDER all conditions, except where...

Erdnase: he coolly proposes to "MAKE GOOD" by transforming the wrong card
Sanders: Has "MADE GOOD" at the bar, where he shines
Erdnase: it is generally dealt ON THE SQUARE in gambling rooms that are run openly Sanders: Is not the western game I yearn to see played ON THE SQUARE,

Erdnase: A CAREFUL PERUSAL OF THE FOLLOWING definitions will save much time and perplexity Sanders: A PERUSAL OF THE FOLLOWING excerpts from the text will convince...

Erdnase: AS IT IS UTTERLY IMPOSSIBLE for me to see at all Sanders: AS IT IS UTTERLY IMPOSSIBLE to replace the missing papers...

Erdnase: so as to PRECLUDE THE POSSIBILITY OF the schemer being discovered with the goods on him. Sanders: the slope of the vein (21 degrees) PRECLUDES THE POSSIBILITY OF the tripod support being used...

Erdnase: THE ENTIRE WORK SHOULD BE DONE by the second fingers and thumbs.
Sanders: and THE ENTIRE WORK DONE during admission and expansion
Erdnase: The thumb movement is IDENTICALLY THE SAME AS IN the true deal
Sanders: when set the machine is operated in IDENTICALLY THE SAME WAY AS IN sinking or...
Erdnase: it is QUITE EQUAL to the hand shuffle as a blind
Sanders: and the sets nearly or QUITE OF EQUAL size.

Erdnase: We give the FACTS AND CONDITIONS of our subject as we find them
Sanders: its fidelity to the topographical features of the region and to geographical FACTS AND CONDITIONS
Erdnase: all men who play for ANY CONSIDERABLE stakes are looking for the best
Sanders: sufficient to sustain ANY CONSIDERABLE thrust without a tendency...
Erdnase: it has been my VERY GREAT GOOD FORTUNE to discover...
Sanders: we know the VERY GREAT AND GOOD FORTUNE we had in studying under you
Erdnase: if requested to determine from what single artifice THE GREATEST ADVANTAGE is derived we would unhesitatingly decide...
Sanders: the plan above described may be of THE GREATEST ADVANTAGE in blocking-out the ores...
Erdnase: to attain the HIGHEST DEGREE OF EXCELLENCE at card manipulation much study and practice are... Sanders: being sincerely desirous to maintain a HIGH STANDARD OF EXCELLENCE for the series of books

Erdnase: The riffle...IS BY FAR THE MORE prevalent method in use among regular card players.
Sanders: this station, while requiring more excavating to construct, IS BY FAR THE MOST economical in the end
Erdnase: THERE WOULD BE LITTLE ADVANTAGE derived from clever shuffling, were the order to be subsequently disturbed in cutting
Sanders: THERE CAN BE LITTLE ADVANTAGE to the profession at large if the discussion as to the best shape for a shaft is to be...

Erdnase: Then he MAKES A PRETENSE of confusing the company by changing their places on the table. Sanders: the society MAKES NO PRETENCE of publishing a connected account of the series

Erdnase: A VARIED EXPERIENCE has impressed us with the belief that all men...
Sanders: A SOMEWHAT VARIED EXPERIENCE as expert in twine manufacture
Erdnase: knowledge was acquired at the usual EXCESSIVE COST to the uninitiated.
Sanders: because it does away with the ponderous and EXCESSIVELY COSTLY...
Erdnase: shift that MAY BE EMPLOYED WITH THE GREATEST probability of success
Sanders: and it MAY BE EMPLOYED WITH GREAT benefit
Erdnase: and it is EMPLOYED almost exclusively IN CONNECTION WITH marked cards
Sanders: a word that is very generally EMPLOYED IN CONNECTION WITH the adjective montanus
Erdnase: The methods described can BE SUCCESSFULLY WORKED with as many as eight or ten cards
Sanders: from the deposits too small to BE SUCCESSFULLY WORKED in a commercial way
Erdnase: to TAKE A POST-GRADUATE COURSE in the highest and most artistic branches of his vocation
Sanders: during the following year he TOOK A POST-GRADUATE COURSE in Civil Engineering
Erdnase: To show THE EASE WITH WHICH the cards travel
Sanders: and THE EASE WITH WHICH it may be manipulated
Erdnase: The ENTIRE stock is RUN up INDEPENDENT OF sight
Sanders: the skip can be RUN ENTIRELY INDEPENDENTLY OF the trammers or carmen
Erdnase: can be made with the right hand IN MUCH THE SAME MANNER
Sanders: near the center of the set IN MUCH THE SAME MANNER as are located the end posts or plates.
Erdnase: There is LITTLE OR NO difficulty in performing this perfectly, and the deal can be...
Sanders: large excavations may be supported with LITTLE OR NO timbering, but usually...
Erdnase: The deck is held in exactly THE SAME MANNER AS DESCRIBED for bottom dealing.
Sanders: have been brought to their places in THE SAME MANNER AS has been DESCRIBED
Erdnase: It can be ACCOMPLISHED IN THE FOLLOWING MANNER:
Sanders: the hole is now charged which is ACCOMPLISHED IN THE FOLLOWING MANNER...
Erdnase: card with the thumb IN THE USUAL MANNER
Sanders: to afford secure support to the sets by blocking and wedging IN THE USUAL MANNER.
Erdnase: the deck IN SUCH A MANNER that the most critical observer
Sanders: that they otherwise might IN SUCH MANNER as they would wish to.
Erdnase: the left-hand packet, which is brought down IN LIKE MANNER, and so on.
Sanders: to which is bolted IN A LIKE MANNER the plunger piece
Erdnase: THE EXACT MANNER IN WHICH IT is performed
Sanders: as to THE MANNER IN WHICH IT came to be selected
Erdnase: but of course hesitating AT SOME OTHER POINT.
Sanders: and another shape or construction more suitable AT SOME OTHER POINT
Erdnase: This method of blind cutting IS PARTICULARLY ADAPTED for working in with the blind riffle Sanders: Such shafts ARE PARTICULARLY WELL ADAPTED to firm ground

Erdnase: but he can pick up any card or group of cards in the order BEST SUITED TO his design Sanders: come together from the six directions in a manner BEST SUITED TO the needs of the occasion.

Erdnase: THE USUAL PRACTICE is to deal from the bottom.

Sanders: THE USUAL PRACTICE being to make the inner faces of the station sets aline [sic] with those of...
Erdnase: bring it down IN THE USUAL WAY of shuffling on
Sanders: are hung IN THE USUAL WAY by lag-screws
Erdnase: it leaves the top and bottom cards IN THE SAME RELATIVE POSITION
Sanders: both being placed IN THE SAME RELATIVE POSITION within the joint
Erdnase: These examples of CULLING, if FAIRLY WELL executed.
Sanders: FAIRLY WELL filled with data CULLED in a measure from geologic reports...
Erdnase: This example MIGHT WELL BE TERMED a fancy cull
Sanders: by what MIGHT BE TERMED an enclosing and protecting shield
Erdnase: His purpose in that respect IS SUFFICIENTLY ANSWERED by keeping the desired cards... Sanders: the required information...IS SUFFICIENTLY ANSWERED in and by the workings of adjoining property

Erdnase: IT DOES NOT MATTER IN THE LEAST when performing
Sanders: while IT DOES NOT DETRACT IN THE LEAST from the column.
Erdnase: IN EITHER EVENT the answer to the first question discloses the identity of the thought card.
Sanders: IN EITHER EVENT it is necessary to clear it out before it can be charged.
Erdnase: The first shift described is executed with both hands AND IS A GREAT FAVORITE.
Sanders: who had been a fellow-cadet with him at West Point AND A GREAT FAVORITE there
Erdnase: Faro cards, USED IN CONNECTION WITH a certain form of "brace" box, are treated in this manner. Sanders: Waste filling is frequently USED IN CONNECTION WITH and as adjunct to the various systems of timbering

Erdnase: There is no difficult sleight-of-hand manipulation CONNECTED WITH THE OPERATION.
Sanders: totals of expense CONNECTED WITH THE development, OPERATION and repair
Erdnase: knowing players require NOTHING MORE THAN a bare suspicion of skill to
Sanders: a method of timbering...is NOTHING MORE THAN the crib of the flat deposits
Erdnase: and the reputation is liable to precede him in MANY ANOTHER.
Sanders: as sweet and handsome as MANY ANOTHER
Erdnase: IT IS WELL TO insist that but one card must be moved at a time.
Sanders: in this classification IT IS WELL TO assume as of the normal type those rocks that possess...
Erdnase: The deck SO ARRANGED makes every thirteenth card the same value
Sanders: shafts are of two kinds, one being SO ARRANGED that the ore cars
Erdnase: IT IS NEEDLESS TO SAY THAT I do not know which cards were selected
Sanders: IT IS NEEDLESS TO SAY THAT exactness in the fitting together of the joints cannot be expected unless all necessary precision has been employed in their framing.

Erdnase: AND AT THE SAME TIME sliding pack outwards and to the right
Sanders: AND AT THE SAME TIME to furnish an opening between the plates and the foot of the shield
Erdnase: was TOO GOOD a thing TO BE passed up.
Sanders: and the joke, TOO GOOD TO BE permitted to die early [CR bio]
Erdnase: the writer uses no sophistry AS AN EXCUSE FOR its existence.
Sanders: he explains this integration or accretion of good hoss-sense AS AN EXCUSE FOR his lapse from...
Erdnase: used CERTAIN terms FOR THE SAKE OF BREVITY
Sanders: FOR THE SAKE OF BREVITY in description, CERTAIN symbols letters or figures
Erdnase: and the third card PROVES TO BE the ace.
Sanders: should either of the walls PROVE TO BE weak
Erdnase: IT WILL BE SEEN THAT the old-fashioned or hand shuffle
Sanders: IT WILL BE SEEN THAT a great deal of timber is used....
Erdnase: IT WILL HAVE BEEN SEEN BY THE FOREGOING THAT the presentation
Sanders: Therefore, FROM THE FOREGOING IT WILL BE SEEN THAT the cost of the square set...
Erdnase: one must have an understanding of the CAUSE AND EFFECT of the various actions.
Sanders: the relation between CAUSE AND EFFECT

Erdnase: He knows little of THE REAL VALUE OF money
Sanders: THE REAL VALUE OF the inclined-bottom bin lies in its facility of discharge
Erdnase: This objection IS entirely OVERCOME BY THE USE OF the break
Sanders: this difficulty IS OVERCOME BY THE USE OF a half right-angled miter
Erdnase: and FOR PRACTICAL PURPOSES stocking more than three should not be attempted
Sanders: would be far too cumbersome FOR PRACTICAL PURPOSES
Erdnase: various METHODS OF LOCATING AND producing selected cards
Sanders: the METHODS OF LOCATING AND aligning the sets are those used for...
Erdnase: and HOLDING THEM IN PLACE by left little finger.
Sanders: the ends of the rungs being wedged to HOLD THEM IN PLACE.

Erdnase: The in-jog card IS HELD IN POSITION BY the little finger
Sanders: these sets ARE HELD IN POSITION BY distance pieces
Erdnase: the deck will have a TENDENCY TO SLIP towards the wrist
Sanders: with no TENDENCY TO split or SLIP
Erdnase: HE also PERFORMS HIS PART with the shears when the lambs come to market
Sanders: That HE'S PLAYED well HIS PART
Erdnase: select the four Jacks FOR THE PURPOSE OF ILLUSTRATING how an original athletic tendency Sanders: FOR THE PURPOSE OF ILLUSTRATION, assume that...

Erdnase: we sorrowfully admit that our own EARLY KNOWLEDGE was acquired...
Sanders: From my EARLY KNOWLEDGE of you
Erdnase: The bottom palm may be held while the deal is in progress WITHOUT INCONVENIENCE.
Sanders: leaves sufficient hight [sic] for passage WITHOUT INCONVENIENCE.
Erdnase: That THIS IS GENERALLY TRUE cannot be denied, BUT it is BY NO MEANS ALWAYS SO.
Sanders: THIS IS GENERALLY TRUE BUT has one or two EXCEPTIONS
Thanks to MagicbyAlfred (on the Genii Erdnase thread) for formulating the above criteria and extracting many of these examples from the larger set documented below.

## 2) Personality, humor, and metaphor

## Prev Next Table of Contents

In the examples in this section, the two authors exhibit their personality and make similar observations about human psychology. They often adopt a humorous and ironic stance and sometimes use almost identical metaphors to express their point of view.

## **** ---- Mocking PROFESSIONALS part 1 (EXHUMING, PRESERVED) ----

Erdnase and Sanders take delight in pointing out hypocrisy. In this example, they describe hidden knowledge as being well/carefully preserved. And they mock so-called professionals and their pretensions and inflated claims, where bogus information is metaphorically exhumed from an obscure/moss-covered location. In addition, they both use alliteration centered on the same term (wicked) for dramatic and ironic effect.

Erdnase: The secrets of professional card playing have been well preserved. [...] Self-styled "ex-professionals" have regaled the public with astounding disclosures of their former wiles and wickedness, and have proven a wonderful knowledge of the subject by exhuming some antiquated moss-covered ruses [p13]

Sanders: [a report] came into my hands and has been carefully preserved by me as a classic... Certainly in part it is too good to keep, and in a spirit of benevolence and as an offering upon the shrine of professional goodwill toward professional brethren, the following extracts have been exhumed from their obscure place of burial...and how many reports presuming to describe mining properties are written that should never have been penned because of the wicked waste of ink resulting therefrom...The following contains the rich kernel removed from the enclosing shell. [ML1913]

The correspondences are as follows:
[So-called professionals]
Erdnase: Self-styled "ex-professionals"
Sanders: [sarcastic] shrine of professional goodwill toward professional brethren
[Exhuming bogus information]
Erdnase: exhuming some antiquated moss-covered ruses
Sanders: (bogus extracts) ... exhumed from their obscure place of burial
[Hidden knowledge]
Erdnase: secrets
Sanders: rich kernel removed from the enclosing shell
[Well/carefully preserved]
Erdnase: well preserved
Sanders: carefully preserved
[Pretensions and inflated claims]
Erdnase: regaled the public with astounding disclosures
Sanders: presuming to describe
[Alliteration on wickedness]
Erdnase: wiles and wickedness
Sanders: wicked waste

It is interesting that Erdnase portrays wickedness as glamorous (regaling, astounding disclosures). In addition to Sanders using wicked in a similarly hyperbolic manner, we find other instances where he humorously amplifies the wrongdoing performed by himself and others.

Sanders: Of alt the BOLD, BAD MEN and TOUGHEST OF TOUGH characters who graduated from the Columbia School of .Mines with the Class of '85, it is probable that there were none so VILLAINOUS, none so LOST TO DECENCY, none so DEGENERATED and MORALLY DEMORALIZED as our mild-mannered and genial comrade "Charlie" Lacombe - unless it be the humble historian of these records of our Class.[CR bio] Sanders: An' ter h'ar him talk uv ther pace he's set; an' uv what he's done, fer he's braggin' yet; WHAT A BAD MAN he [CR bio]
Sanders: One of the greatest delights and heart-satisfying rewards that can come to "a brave man struggling in the storms of fate," that Wandering Jew, that vagabonding Happy HOOLIGAN... [CR bio]

See also more parallels between this mining letter and EATCT. And elsewhere, both writers poke fun at their own vanity and refer to pretense more generally.
**** ---- Mocking PROFESSIONALS part 2 ---

In the following related example, the two authors express the same attitude towards shameless writers who have given recycled, subpar information to the public in an aggressive and deceptive manner. Erdnase's self-styled "exprofessionals" (as above) corresponds to yet another passage in Sanders, where he criticizes self-constituted "historians". Both phrases mock their targets using hyphenated adjectives sharing the same lead word (SELF-styled vs SELF-constituted). And both groups ("ex-professionals" and "historians") are encased in scare quotes to amplify the sarcastic tone.

Erdnase: Self-styled "ex-professionals" have regaled the public with astounding disclosures of their former wiles and wickedness, and have proven a wonderful knowledge of the subject by exhuming some antiquated mosscovered ruses as well known as nursery rhymes, and even these extraordinary revelations are calmly dismissed with the assertion that this or that artifice is employed; in nowise attempting to explain the process or give the detail of the action mentioned. If terrific denunciation of erstwhile associates, and a diatribe on the awful consequences of gambling are a criterion of ability, these purified prodigals must have been very dangerous companions at the card table. [p13]

Sanders: That unblushing visigoth, the literary huckster with his second-hand wares, has broken in upon our sleeplessness, jarred coarsely on our sensibilities, usurped without invitation or consent the most responsible and solemn position which our civilization has created and in which every citizen has an interest, and has palmed off upon us our own alleged history. These literary commercial travelers seize extant information without reference to its reliability to give currency to wares of unimportant or apocryphal quality...His mission is fulfilled when he tumbles into one kaleideoscopic mass what has been said, without reference to what has occurred. Such is our self-constituted "historian" and of such quality is his alleged "History." [mhs-vol2 intro]

The correspondences are as follows:

## [Shameless writers]

Erdnase: Self-styled "ex-professionals" I purified prodigals
Sanders: self-constituted "historian" I unblushing visigoth, the literary huckster
[The public]
Erdnase: the public
Sanders: civilization I every citizen

## [Recycled/subpar info]

Erdnase: antiquated moss-covered ruses as well known as nursery rhymes
Sanders: second-hand wares I extant information without reference to its reliability I unimportant or apocryphal quality.
[Deceptive manner]
Erdnase: [sarcastically] astounding disclosures I extraordinary revelations
Sanders: palmed off upon us our own alleged history
[Aggressive manner]
Erdnase: terrific denunciation I diatribe
Sanders: broken in upon our sleeplessness, jarred coarsely I usurped without invitation or consent
Also note the similarity between Sanders' description of "sensibilities" and a different passage, elsewhere in Erdnase, where sensibilities are also being coarsely and almost physically offended.

Erdnase: BRUTALLY taken advantage of...EXTREMELY GALLING to their aristocratic SENSIBILITIES. [p173-174 Exclusive Coterie]
Sanders: JARRED COARSELY on our SENSIBILITIES [in Intro above]
Note: The Sanders passage comes from the Introduction to Contributions to Historical Society of Montana, Vol 2, which Sanders compiled and edited. The Introduction is unattributed, but Sanders was responsible for compiling and editing the volume, making him almost surely the author of the Introduction. His authorship is additionally buttressed by a set of linguistic correspondences between the Introduction and Sanders' other writings as detailed here.
**** ---- acquiring WISDOM in bulk when younger [knowledge] ----
In this example, both writers use visual metaphors (imbibe, picked up) to describe the large amount (heap, copious, vast, many various) of worldly knowledge (wisdom, knowledge) they acquired in their younger days. And Sanders, interestingly, characterizes the hustling he performed, perhaps in a sly nod to his hustling at the card table.

Erdnase: We naturally began to IMBIBE WISDOM in COPIOUS DRAUGHTS at the customary sucker rates...and the sum of our PRESENT KNOWLEDGE is proffered in this volume [p14]

Sanders: We did a lot of HUSTLIN' then and gained a HEAP OF KNOWLEDGE and PICKED VAST WISDOM UP IN CHUNKS in many various lines. [CR poem]

Erdnase: A self-satisfied unlicked cub with a fairly fat bank roll was TOO GOOD A THING TO BE PASSED UP. [p14]
Sanders: and the joke, TOO GOOD TO BE PERMITTED TO DIE EARLY [CR bio]
Sanders: Certainly in part it is TOO GOOD TO KEEP, and in a spirit of benevolence...
---- other "TOO XX TO YY" examples ----
Erdnase: some of us are TOO TIMID TO RISK A DOLLAR [p9]
Sanders: those dear bygone times were TOO JOYOUS TO LAST [CR poem]
Sanders: whereby hangs a tale which Sanders says is TOO LONG AND BOLD TO RELATE HERE [CR bio]
****---- doubtless/truly cause X to smile ----
Erdnase: will DOUBTLESS CAUSE certain cassino players TO SMILE. [p116]
Sanders: But it TRULY would CAUSE me TO SMILE [CR Poem]
**** ---- idiom: having the cash/price (money as a prerequisite for purchase) ----
In this, Sanders quotes one of his classmates using the same idiom as Erdnase.
Erdnase: but one reservation, - THAT HE HAS THE PRICE. [p18]
Sanders: he asserts he is still able to eat three large meals per day - "WHEN I HAVE THE CASH"! [CR bio]
[pointed out by Marty Demarest]
**** ---- deferring telling a story/tale/letter (for unstated reasons) ----

In this example, the writers have something very interesting to tell. But they refrain from fully revealing it, possibly for dramatic effect, or because it would be embarrassing or self-incriminating.

Erdnase: the back palm once helped us out of a difficult situation BUT THAT IS ANOTHER STORY. [p147] Sanders: whereby hangs a TALE which Sanders says is TOO LONG AND BOLD TO RELATE HERE [CR bio] Sanders: More of the letter might be given, but I REFRAIN. [CR bio]

They both use the word "refrain" in this context.
Erdnase: It requires the philosophy of the stoic to possess any great superiority and REFRAIN from boasting to friend or foe. [p23]
Sanders: More of the letter might be given, but I REFRAIN. [CR bio]
Sanders has others of this sort where he sets the stage but then pulls back.
Sanders: We see him (and another WHO SHALL BE NAMELESS) at a semi-annual examination, interviewing two unwashed Italian organ grinders [CR bio]
Sanders: Hollis has always accused the scribe of flirting with the waitress or the cook or somebody; but since he did not bring all of the proofs and records back from that journey into the unknown, the same is not proven, and though the flirting is barely possible, IT MAY NOT HAVE HAPPENED. [CR bio]
**** ---- "make good" ----
Erdnase and Sanders both use scare quotes extensively to signal ironic or some other non-standard sense. In this instance they both use scare quotes on the same short idiomatic phrase ("make good"). It is also worth noting that "make good" has a connotation related to paying debts. Sanders is known to have received letters related to gambling debts.

Erdnase: he coolly proposes to "MAKE GOOD" by transforming the wrong card [p151]
Sanders: Has "MADE GOOD" at the bar, where he shines [CR poem]
Sanders: But in his work he's long MADE GOOD [CR poem]
**** ---- detection/accusation is almost/barely possible and proof is lacking ----
Erdnase: DETECTION in any particular artifice is ALMOST IMPOSSIBLE, and PROOF of the act is WHOLLY WANTING. [p24]
Sanders: [humorously] Hollis has always ACCUSED the scribe of flirting with the waitress or the cook or somebody; but since he did not bring all of the PROOFS and records back from that journey into the unknown, the same is NOT PROVEN, and though the flirting is BARELY POSSIBLE, it may not have happened. [CR bio]
**** ---- Boasting | Vanity | Insufferable conceit | Bragging ----
Erdnase and Sanders both refer to the psychology behind vanity and boasting.
Erdnase: Excessive VANITY proves the undoing of many experts...he must never admit his skill or GROW CHESTY over his ability. It requires the philosophy of the stoic to possess any great superiority and refrain from BOASTING to friend or foe. He must be content to rank with the common herd. [p23]
Erdnase: If the performer cannot resist THE TEMPTATION TO PARADE HIS DIGITAL ABILITY... [p128]
Sanders: Not given to VAIN BOASTINGS was he, and we learned but little of his life's history [CR bio]
And more significantly, they confess to this personality flaw themselves. Erdnase admits to being "self-satisfied" and to his "insufferable conceit." And Sanders mocks himself as "braggin' yet." Like Erdnase, he can see right through his own pretense, admonishing himself "you can't fool me." In a second instance, he contrasts conceit ("vain boastings") with true "high and reckless courage." And in a third instance, he idealizes the benefits of true courage and its effect metaphorically on the HEART. So rather than Erdnase's "HEARTrending jolts," the truly brave man would reap "HEART-satisfying rewards."

Erdnase: OVERWEENING FAITH in our own potency. We BUCKED THE TIGER voluntarily, and censure no one for the inevitable result. A SELF-SATISFIED unlicked cub with a fairly fat bank roll...but the jars to our pocketbook caused far less anguish than the HEARTRENDING JOLTS to our INSUFFERABLE CONCEIT [p14]

Sanders: [mocking] to hear him talk of the pace he's set; an' of what he's done, for HE'S BRAGGIN' YET; ... but I know you, Bill, an' you can't fool me!

Sanders: [contrasting] not given to VAIN BOASTINGS...that high and reckless COURAGE
Sanders: [idealizing] HEART-SATISFYING REWARDS that can come to "a BRAVE MAN struggling in the storms of fate,"

They also both make a point of highlighting the modesty in their own or others' claims/assertions.
Erdnase: We MODESTLY CLAIM originality for the particular manner of accomplishing... [p13-14] Sanders: He now MODESTLY ASSERTS that he wears "only an upper-lip adornment," [CR bio]
Sanders: And we all know full well how necessary the work is, whatever, in OUR MODESTY, we may state as to the possession of brains. [CR bio]
**** ---- sole/chiefest delight in \{making the hazard | overcoming danger...venturesome \}

In this example, both writers describe the special delight that comes from taking a risk and succeeding.
Erdnase: The passion culminates in the professional. Winning is not his SOLE DELIGHT. Some one has remarked that there is but one pleasure in life greater than winning, that is, in MAKING THE HAZARD. [p9]

Sanders: he was of that VENTURESOME and independent spirit which found its CHIEFEST DELIGHT in OVERCOMING THE DANGERS and enduring the hardships incident to the VENTURESOME life [MHS-vol2 footnote]

Sanders, in this other example, refers to the delights of an unsettled mining life. And given the close association of mining camps with gambling, he's likely referring to a similar set of delights.

Sanders: Huntington has placed taboo the WILD DELIGHTS AND EXHILERATING INFLUENCES of the MINING PROFESSION and settled into the more prosaic, even if more respectable, calling. [CR bio]

Further cementing the connection to gambling, in this poem, he mentions this same classmate Huntington having "quit the game" the mining engineers "have played."
**** ---- FLASH ----

In this example a simple word choice reveals a larger metaphor and similar patterns of thought.
Erdnase: made like a FLASH [p134]
Erdnase: in a FLASH [p92]
Sanders: humour would FLASH and beam in him as FLASH the lightnings
In addition to the word choice itself, there is something very interesting about FLASH. Erdnase uses the word six times to describe the speed of certain sleights being performed; and in three of those he mentions the absence of sound. In one case, however, he characterizes that missing sound as a "snap and crack," clearly of lightning.

Erdnase: The shift can be MADE LIKE A FLASH, and with the cards in perfect order. When executed perfectly, the ONLY SOUND is the slipping of one packet over the other. There is NO SNAP OR CRACK, and it is in every way worthy of the practice necessary to acquire it. [p134]

Significantly, when Sanders uses the term FLASH, he mentions lightning explicitly and even invokes the way lightning forms on a warm midsummer day. The metaphorical FLASH has become literal.

Sanders: enjoyed the added WARMTH UPON A MIDSUMMER DAY...mirth and humor would FLASH and beam in him as FLASH the LIGHTNINGS of his beloved Physics.

It could be argued that the sound of a shift is as important an aspect as the speed, and hence we would expect a description of its sound. While this is true, it would be unusual to characterize the sound of a shift as a "snap or crack" independently of the flash of lightning metaphor. In both texts, the author uses the term "flash" figuratively but augments the metaphor by connecting it to its literal roots.

And then, in a pair of consecutive paragraphs, Erdnase further cements the connection between the FLASH metaphor and lightning.

Erdnase: The actual palming can be done IN A FLASH, and as we have said, the only objections are the necessary manoeuvers to obtain the position in a natural and easy manner...In the second part of this book will be found, under the caption Changes, several methods of palming which are LIGHTNING-LIKE in rapidity but are more applicable to card conjuring than card playing. [p92-93]

To summarize: in this example, both writers are using the term FLASH metaphorically, to signify something happening QUICKLY and SUDDENLY. But in doing so, they are thinking (consciously or unconsciously) in terms of the metaphorical roots (LIGHTNING) from which it is derived, even in cases where lightning is not mentioned. This is a deeper and more significant similarity than a mere word choice - it is a sign of a similar thought process underlying that choice.
[Matching words "flash" noticed by Leonard Hevia]
---- Effect of suspicion ----

Both writers describe a situation where there's suspicion related to a deceptive action (prank or cheating). Erdnase alternately describes both the cheater and the potential card table victims leaving when suspicion arises. Sanders
similarly describes the perpetrators of a prank leaving the scene to avoid suspicion and/or the turmoil in its aftermath. And they both metaphorically describe the motivation for leaving in terms of abnormal atmospheric conditions ("matters were getting warm" and "seek a less misty atmosphere").

Erdnase: Effect of Suspicion: To be suspected of skill is a death blow to the professional...but where there is knowledge or even mere SUSPICION among the players of his ability as a manipulator, IT WILL SUGGEST RETIREMENT at once rather than playing against the handicap of being especially watched, and a further possibility of getting his congé from the company. But though under certain circumstances a past-master at the card table may be suspected, detection in any particular artifice is almost impossible, and proof of the act is wholly wanting. For those reasons knowing players require nothing more than a bare SUSPICION of skill to immediately SEEK A LESS MISTY ATMOSPHERE. [p24]

Sanders: [Describing the aftermath of "J.B." and "pal" (probably Sanders) surreptitiously playing a prank on campus] Up rush a number of windows with Tommy Rocks glaring Anathema, Waller shaking his fists in vigorous tones and general turmoil from examination rooms; and when the sons of sunny Italy are incontinently bounced to the street by Mike and his cohorts, we see in our mind's eye even Prexy Barnard mildly rushing from his residence, with ear-trumpet in hand, to order them to remove from beneath his windows and cease their discordant noises and J. B. AND PAL SAUNTERING DOWN MADISON AVENUE, for MATTERS WERE GETTING WARM in and about college.

Erdnase separately reinforces this same underlying philosophy: The slightest action that indicates such a purpose invites suspicion, and there is an old adage much quoted that runs," If suspected quit." [p78]
---- pay/repay for labor ----

Erdnase: There is no branch of conjuring that so fully REPAYS THE AMATEUR FOR HIS LABOR and study as sleight-of-hand with [p125]
Sanders: at the homage which is PAID THEM FOR LABOR which on retrospection their modesty even will not permit them to belittle. [mhs-vol2 intro]
---- the tide strongly (turns | flows) (towards | in favor of) ----
Erdnase: to TURN the TIDE STRONGLY IN FAVOR OF the advantage player [p77]
Sanders: In this wise the human TIDE that had FLOWED too STRONGLY TOWARDS the west
---- as an excuse for ----
Erdnase: the writer uses no sophistry AS AN EXCUSE FOR its existence. [p3]
Sanders: he explains this integration or accretion of good hoss-sense AS AN EXCUSE FOR his lapse from...
---- he plays/performs his part ----
Erdnase: He also PERFORMS HIS PART with the shears when the lambs come to market [p10]
Sanders: That he's PLAYED well HIS PART [CR Poem]
---- some incident [from personal memories] ----
Erdnase: If you can associate one of them with a prominent date, or SOME INCIDENT in your own life [p194]
Sanders: SOME INCIDENTS of our College days, some characteristics of our class mates, some happenings or events that then occurred, are indelibly woven into our memories of those times. [CR bio]
---- target shooting ----
The image of shooting at a target is employed metaphorically by both writers. We note that Sanders loved the outdoors and often went on hunting trips and that Erdnase uses other country-inspired imagery.

Erdnase: Proficiency in TARGET practice is not the sole qualification of the TRAP SHOOTER. Many experts with the gun who can nonchalantly RING UP THE BULL'S EYE in a SHOOTING GALLERY could not hit the side of a barn in a DUEL. The greater the emergency, or the greater the stakes, the greater the nerve required. [p22-23]
Erdnase: two or three coups in the course of an evening will not FLUSH THE QUARRY [p19]
Sanders: Some characteristic of one's classmate is usually made a peg upon which to hang, or a TARGET for some SHAFT if one sharp enough to tickle can be found in the QUIVER [CR bio]

In the following case Sanders refers to a target and weapon in a purely literal (though humorous) manner.
Sanders: tremendously big SHOT-GUN or BLUNDERBUSS was turned loose at us at short range which luckily or unluckily missed a hoped-for TARGET [CR bio]
---- so-called ----

Another example of both men poking fun at pretense and inflated status.
Erdnase: We have neither grievance against the fraternity nor sympathy for SO-CALLED victims. [p10]
Sanders: in the SO-CALLED lunch room
---- universal/popular beliefs (being wrong or dangerous)
Both Erdnase and Sanders debunk popular beliefs and the prevailing wisdom.
Erdnase: the almost UNIVERSAL BELIEF that none but the unsophisticated can be deceived by "blind" shuffling...The player WHO BELIEVES he cannot be DECEIVED is in great danger. [p21]
Erdnase: This artifice is ERRONEOUSLY SUPPOSED to be indispensable to the professional player [p95]

Sanders: this POPULAR BELIEF that the finding of the nugget at Sutter's Fort marked the discovery of gold in California is undoubtedly a MISTAKEN ONE.
Sanders: Indeed, it is a fact that its use in large operations IS OFTEN FOUND to be cheaper in the end than are many of the SUPPOSEDLY more economical methods

## 3) The author on his work

Prev Next Table of Contents

Both authors describe the work they have written in very similar ways, often touching on the themes of [excellence] and [rigor/precision]. They instruct the reader on how to read the work, describe how it has been constructed, and stress the importance of details.
**** ---- certain terms/symbols used/employed FOR THE SAKE OF BREVITY to designate/describe the various/particular ----

In this example, Erdnase and Sanders describe the same idea using almost identical terms and phrasing.
Erdnase: we have, in describing the various processes and conditions, used certain terms for the sake of brevity, to designate the particular matters referred to. [p25]

Sanders: for the sake of brevity in description, certain symbols letters or figures, are employed to designate the various mine workings, as follows: [RFMW]
**** ---- subject/method is FOREIGN TO the purpose/subject but (cursory review / touched upon)
Erdnase: The subject of prepared cards is almost as foreign to the main purpose of this work as the preceding one of hold outs, but a cursory review of the commoner kinds and their uses may not be out of place. [p15]
Erdnase: The principal sleights employed in card tricks, that are not touched upon in the first part of this book [p128]

Sanders: Nor is it intended to explain methods technically foreign to the subject, although such will be touched upon.
**** ---- it is not the purpose...Disclaimers on intentions/purpose/limitations of what is covered ----
Erdnase: IT IS NOT OUR PURPOSE TO DESCRIBE the various kinds of apparatus, or prepared or mechanical cards, that play so great a part in the professional conjurer's startling exhibitions. [p171]

Sanders: IT IS NOT THE PROVINCE OF THIS ARTICLE TO TOUCH UPON methods of mining in use above ground, whether by hydraulic mining, or other processes, but rather to deal with the support of underground excavations by the use of timbers, and the details of mining therewith connected. NOR IS IT INTENDED to... [MT editor]
**** ---- a PERUSAL OF THE FOLLOWING definitions/excerpts will (convince | aid comprehension) ---
Erdnase: A CAREFUL PERUSAL OF THE FOLLOWING definitions will save much time and perplexity in COMPREHENDING the processes described [p25]
Sanders: A PERUSAL OF THE FOLLOWING excerpts from the text will CONVINCE any fair minded unbiased mining engineer [ML1913]
---- A careful perusal/review ----
Erdnase: A CAREFUL PERUSAL of the following definitions will save much time and perplexity... [p25]
Sanders: From A CAREFUL INVESTIGATION AND REVIEW of available information
**** ---- writer/publisher uses no sophistry/pretense in presenting this work ----
Erdnase: the writer USES NO SOPHISTRY as an excuse for its existence [p3]
Sanders: the society MAKES NO PRETENCE of publishing a connected account of the series [MHS-lib]
---- makes a pretense ----
Erdnase: Then he MAKES A PRETENSE of confusing the company by changing their places on the table. [p122]
Sanders: the society MAKES NO PRETENCE of publishing a connected account of the series [MHS-lib]
---- Others with pretense ----
Erdnase: PRETENSIONS of piety, are not foisted as a justification for imparting the knowledge it contains Sanders: Beyond any PRETENSE of our ours the volume was commended by literary men of prominence [MHSvol2]

- See also transitive no, without inconvenience, and unconcern
**** ---- claiming the uniqueness of their book/document among others on the subject [excellence] -
Erdnase: Hence this work STANDS UNIQUE IN THE LIST OF card books. [p13]
Sanders: that it is UNIQUE AMONG MANY DOCUMENTS PERTAINING TO mines and mining situations [MT]
**** ---- the writer unable to find/learn/establish a fact (in field of [knowledge]) ----

Erdnase: yet WE have been UNABLE TO FIND in THE WHOLE CATEGORY more than an incidental reference... [p13]
Sanders: the WRITER has been UNABLE TO LEARN if this is A FACT.
Sanders: but the truth of this statement I have been UNABLE to definitely ESTABLISH
**** ---- describe/present every known... [knowledge] ----

Erdnase: ...DESCRIBING with detail and illustration EVERY KNOWN expedient, manoeuvre and strategem [p1] Sanders: the mines operated under these methods PRESENT EVERY KNOWN characteristic of lode formation.
---- offering a treatise/narration and stressing the importance of completeness/details [precision] ----
Erdnase: A TREATISE on the Science and Art of Manipulating Cards [p1]
Erdnase: the SUM of our present knowledge is PROFFERED THIS IN VOLUME [p14]
Erdnase: IMPORTANCE of DETAILS -- The finished card expert considers NOTHING TOO TRIVIAL that in any way contributes to his success [p25]
Erdnase: The EXACT manner in which each artifice is performed is FULLY DESCRIBED IN MINUTIA. [p12]
Sanders: it has appeared worth while to make the present COLLECTION WHICH IS OFFERED not as a complete TREATISE on the subject, but rather as a series of essays which go fully into many IMPORTANT DETAILS [MT editor]
Sanders: the FACTS HERE NARRATED...I am compelled to rely upon memory which may not be EXACT as to SPECIFIC DETAILS and dates [MHS-vol7]
Sanders: IMPORTANT DETAILS connected with the methods of timbering HEREIN DESCRIBED, and other systems now in successful operation among the metal mines of this country, are excluded from this necessarily abridged article.
---- Exact details/minutia (in statements/descriptions) [rigor/precision]----

Erdnase: The EXACT manner in which each artifice is performed is fully DESCRIBED in MINUTIA. [p12] Sanders: the facts...may not be EXACT as to SPECIFIC DETAILS and dates although in all but MINOR POINTS the STATEMENTS are correct. [MHS-vol7]
---- enumeration in a volume [precision] ----

Erdnase: The ENUMERATION alone of these devices would fill a VOLUME twice this size [p171] Sanders: the following ENUMERATION, taken in part from VOLUME 1... [MHS-lib]

Sanders: The various considerations ENUMERATED above were sufficiently conclusive to satisfy the historian..

## 4) Rigor and Precision

## Prev Next Table of Contents

Erdnase and Sanders write in a very clear analytical style. This includes the use of mathematical and logical terms such as axiom, true, rules, prove, preclude, requirements, sufficiency, invariably, generally, knowledge, facts. And they both take care to qualify degrees of precision (to some extent, exactly, regularity, etc) and other truth conditions (with the exception, precludes the possibility, etc). Sanders was trained as an engineer and this tendency is likely an outgrowth from that.
**** ---- this is generally true but (not always so / exceptions): ---
Erdnase: That THIS IS GENERALLY TRUE cannot be denied, BUT it is BY NO MEANS ALWAYS SO. [p109] Sanders: THIS IS GENERALLY TRUE BUT has one or two EXCEPTIONS [SMR]

Sanders: it is CERTAIN that such is TRUE ONLY IN PART [L-1896]
Sanders: This HYPOTHESIS, however, is TRUE ONLY IN PART; for through causes that are SOMETIMES KNOWN, BUT OFTEN are UNKNOWN,
---- with the exception ----
Erdnase:: WITH THE EXCEPTION of the first shuffle [p75]
Sanders: in a manner almost identical with that of the one-compartment shaft, WITH THE EXCEPTION that the sides plates are..
**** ---- impossibility/possibility ----
---- as it is utterly impossible
Erdnase: AS IT IS UTTERLY IMPOSSIBLE for me to see at all [p176]
Sanders: AS IT IS UTTERLY IMPOSSIBLE to replace the missing papers... [MHS-vol3]
--- almost/entirely impossible...prove/establish
Erdnase: is ALMOST IMPOSSIBLE, and PROOF of the act is wholly wanting [p24]
---- quite/almost impossible...without
Erdnase: as it appears QUITE IMPOSSIBLE TO throw the top card WITHOUT dropping both. [p120
Sanders: more, it is ALMOST IMPOSSIBLE TO replace a rung WITHOUT destroying
---- preclude the possibility of ----
Erdnase: so as to PRECLUDE THE POSSIBILITY OF the schemer being discovered with the goods on him. [p116]
Sanders: the slope of the vein (21 degrees) PRECLUDES THE POSSIBILITY OF the tripod support being used... [SMR]
---- possibility of detection/location in any particular ----
Erdnase: detection IN ANY PARTICULAR artifice is almost IMPOSSIBLE [p24]
Sanders: it then becomes easily POSSIBLE to locate and describe any point WITHIN ANY PARTICULAR block of ground [ref scheme]
---- the use of $\rightarrow$ possible/impossible
Erdnase: THE USE OF the break during a shuffle MAKES IT POSSIBLE [26]
Sanders: Under such conditions THE USE OF full-length wall plates IS IMPOSSIBLE
---- the least/greatest possible/probability ----
Erdnase: THE LEAST POSSIBLE pressure should be exerted when [p38]
Erdnase: the two packets pass through THE LEAST POSSIBLE space in changing their position [p99] Sanders: to form a connection that will weaken the timbers forming the " set " or frame IN THE LEAST POSSIBLE degree

Erdnase: employed with THE GREATEST PROBABILITY of success at the card table [p99]
Sanders: this framing is such as obtains THE GREATEST POSSIBLE stiffness...
**** ---- demonstrate/establish the truth of assertion/statement ----
Erdnase: I shall DEMONSTRATE the TRUTH OF my ASSERTION. [p191]
Sanders: but the TRUTH OF this STATEMENT I have been unable definitely to ESTABLISH [MHS-vol7]

Erdnase: but we regret the TRUTH OF the CONFESSION that once upon a time we were... [p116]
**** ---- method/axiom should be strictly/invariably followed/adhered-to ----

Erdnase: It is an EXCELLENT MANNER of holding the deck for the true shuffle, and SHOULD BE STRICTLY ADHERED TO on all occasions. [p29]
Sanders: this latter is an AXIOM in mining during this period of development, and SHOULD BE INVARIABLY FOLLOWED where possible.

Erdnase: It is almost an AXIOM that a novice will win his first stake. [p9]
Sanders: this latter is an AXIOM in mining
**** ---- identically the same as in ----

Erdnase: The thumb movement is IDENTICALLY THE SAME AS IN the true deal [p55]
Sanders: when set the machine is operated in IDENTICALLY THE SAME WAY AS IN sinking or...[SMR]
Erdnase: The positions of the hands ARE IDENTICALLY THE SAME AS the first method [p85]
Erdnase: Each hand occupies IDENTICALLY THE SAME position. [p161]
---- exactly the same ----
Erdnase: The deck is held in EXACTLY THE SAME manner as described [p56]
Sanders: bottom of a deep shaft will be of EXACTLY THE SAME interior
---- practically the same/identical ----
Erdnase: the method IS PRACTICALLY THE SAME as the "Longitudinal," [p135]
Sanders: a method of spiling is employed that IS PRACTICALLY IDENTICAL WITH...
---- precisely the same [erdnase only] ----
Erdnase: PRECISELY THE SAME movement is made as in taking off a small packet by the ends [p75]
Erdnase: it brings the dealer's set in PRECISELY THE SAME position as the first shuffle [p114]
---- quite (of) equal ----
Erdnase: it is QUITE EQUAL to the hand shuffle as a blind [p33]
Sanders: and the sets nearly or QUITE OF EQUAL size.
**** ---- correct positions...accurately secured/joined ----
Erdnase: The CORRECT POSITIONS and movements can be ACCURATELY SECURED [p24]
Sanders: and the joints thus framed will be in their CORRECT RELATIVE POSITIONS, exact in size and shape,
and they will JOIN ACCURATELY with those ...
---- proper positions ----
Erdnase: It is very important to adopt the PROPER POSITIONS for the fingers in these cuts. [p43]
Sanders: the timbers shall have been placed in their PROPER POSITIONS.
**** ---- Proof ----
---- [some bad thing] PROVES to be (UN)SUCCESSFUL ----
Erdnase: other RUSES, which are less risky, have PROVEN UNSUCCESSFUL [p23]
Erdnase: This CLUMSY JUGGLING might PROVE SATISFACTORY if performed by an awkward novice [p165]
Sanders: they [CRIB NOTES] have been PROVED TO BE very SUCCESSFUL [MINER]
--- almost/entirely impossible...proof
Erdnase: is ALMOST IMPOSSIBLE, and PROOF of the act is wholly wanting [p24]
Sanders: it PROVED to be ENTIRELY IMPOSSIBLE to ESTABLISH [MHS-vol7]
---- conclusively/sufficient prove/satisfy ----
Erdnase: To CONCLUSIVELY PROVE that I take no part in the action [p176]
Sanders: the ample success of the Whiting or Red Jacket double-width six-compartment shaft of the Calumet \& Hecla mines is SUFFICIENT PROOF. [L1-1906]
Sanders: sufficiently CONCLUSIVE to SATISFY the historian..
---- disprove ----
Erdnase: I have duplicate cards concealed in my coat above, but that is easily DISPROVED [p187]
Sanders: it seems impossible to DISPROVE that his description bears especial reference to... [MHS-vol7]
---- prove to be ----
Erdnase: and the third card PROVES TO BE the ace. [p123]
Sanders: should either of the walls PROVE TO BE weak, this single piece
Erdnase: To all lovers of card games it should PROVE INTERESTING, [p3]
Sanders: the same is not PROVEN, and though the flirting is barely POSSIBLE, it may not have happened.
Sanders: oft PROVED BY RULE OF THUMB [CR poem]
**** ---- it will be seen by/from the foregoing that... ----
The passive constructions "It will be seen that" and "it is found to" are often used by technically trained people accustomed to logical arguments, mathematical proofs, etc. In the first pairing below, we also find an identical reference to the precondition ("the foregoing").

Erdnase: IT WILL HAVE BEEN SEEN BY THE FOREGOING THAT the presentation [p175]
Sanders: Therefore, FROM THE FOREGOING IT WILL BE SEEN THAT the cost of the square set..
Erdnase: IT WILL BE SEEN THAT the old-fashioned or hand shuffle gives the greater possibilities... [p22]
Erdnase: Hence IT WILL BE SEEN THAT proficiency in one artifice does not finish the education of the professional [p23]
Sanders: IT WILL BE SEEN THAT a great deal of timber is used...
Sanders: IT WILL BE SEEN THAT the cost of the square set placed in the mine...
---- is found to ----
Erdnase: and IT IS FOUND TO consist of the four Queens only. [p172]
Erdnase: selected cards are commanded to change places and FOUND TO have done so. [p177]
Sanders: Indeed, it is a fact that its use in large operations IS OFTEN FOUND TO be cheaper in the end
**** ---- facts ----
---- facts and conditions ----
Erdnase: We give the FACTS AND CONDITIONS of our subject as we find them [p10]
Sanders: is so exact in its fidelity to the topographical features of the region and to geographical FACTS AND CONDITIONS
---- it is nevertheless (a fact / certain) that ----
Erdnase: IT IS NEVERTHELESS A FACT THAT the coat sleeve of the magician is to him much the same as a Saratoga trunk to a summer girl [p185]
Sanders: IT IS NEVERTHELESS CERTAIN THAT the Class as a whole has followed with very great interest and pride his success and good fortune... [CR bio]
---- it is a fact (well known / often found) ----
Erdnase: but IT IS A FACT WELL KNOWN to conjurers. [p175]
Sanders: indeed, IT IS A FACT that its use in large operations IS OFTEN FOUND to be cheaper in the end...
---- the fact that... (tell whether / tell the true / accept / find to be ) ----
Erdnase: THE FACT THAT he cannot TELL WHETHER all or none were [p190]

Erdnase: conscious OF THE FACT THAT he himself cannot TELL THE TRUE from the blind [p21]
Sanders: THE FACT THAT on this point Father Coquard ACCEPTED the indirect or hearsay EVIDENCE
Sanders: it is A FACT THAT its use in large operations is often FOUND TO BE
---- Rules ----
---- as a rule ----

Erdnase: and AS A RULE is generous, careless and improvident. [p10]
Sanders: AS A RULE yield the most durable woods
---- the rule (is / should be) ----
Erdnase: THE RULE IS "divide the number by thirteen," [p183-184]
Erdnase: The INVIOLABLE RULE of the professional IS uniformity of action [p22]
Sanders: THE RULE SHOULD BE that the size of workings must be ample to carry out their purposes properly, BUT NOT larger than is necessary for...

Erdnase: The cautious and prudent expert MAKES IT A RULE to NEVER "hold out," or palm extra cards.. [p115]
Erdnase: IT IS THE RULE for players to cut in about the same manner each time. [p113]
Erdnase: AS A GENERAL RULE the card expert WILL NOT hold out EXCEPT on his own deal for the cut [p113]
---- (as a rule / generally) careless ----
Erdnase: and AS A RULE IS generous, CARELESS and improvident. [p10]
Sanders: they are GENERALLY caused by CARELESSNESS as in improperly feeding the machine or by...
---- Laws of nature and causality ----
---- laws of truth/nature/chance/science ----
Erdnase: The LAWS OF CHANCE are as IMMUTABLE as the LAWS OF NATURE. [p9]
Sanders: Acquire the LAWS OF TECHNIC TRUTH AND SCIENTIFIC LORE [CR poem]
---- fundamental principles/forces
Erdnase: to obtain an understanding of its FUNDAMENTAL PRINCIPLES [p194]
Sanders: All pressure affecting earthworks is due to NATURAL FORCES, of which GRAVITY acting vertically downward is the FUNDAMENTAL consideration.
---- cause and effect
Erdnase: one must have an understanding of THE CAUSE AND EFFECT of the various actions. [p80]
Sanders: or to follow out in them the relation between CAUSE AND EFFECT
---- (caused by I due to) resistance [as force in physics]
Erdnase: The turn is CAUSED BY the RESISTANCE of the air against the protruding side. [p170]
Sanders: The pressure-forces encountered in underground excavations are DUE TO THE RESISTANCES
offered by the rock-masses to the force of gravity
---- (entire) run independent of
Erdnase: The ENTIRE stock is RUN up INDEPENDENT OF sight [p69]
Sanders: the skip can be RUN ENTIRELY INDEPENDENTLY OF the trammers or carmen
---- bearing on [logical/causal connection]
Erdnase: The first under-cut and shuffle-off, in the foregoing example, has no BEARING ON the result [p79] Sanders: Because of its interest and its BEARING UPON this subject
---- complete/filled (with) data ----
Erdnase: give once more to the world COMPLETE AND SCIENTIFIC DATA for positively ascertaining the immediate whereabouts of such metals as gold [p175]
Sanders: unique document that is readable and fairly well FILLED WITH DATA culled in a measure from... [ML1913]
---- fulfil/meet the requirements of ----
Erdnase: other methods of doctoring cards to MEET THE REQUIREMENTS OF particular games [p17-18] Sanders: and which so far FULFILS THE REQUIREMENTS OF the occasion
---- the required (used as an adjective) ----
Erdnase: repeated until THE REQUIRED number are jogged [p63]
Erdnase: If THE REQUIRED suit is the next [p183]
Erdnase: and mentally urge THE REQUIRED action [p196]
Sanders: each scantling is bored at THE REQUIRED intervals
Sanders: it sometimes happens that THE REQUIRED information
Sanders: poles of THE REQUIRED length

- See also THE $+\mathrm{adj}+$ noun (reified $)$.

The examples below are not necessarily significant on their own. But the large number of linguistically similar quantifications and qualifications demonstrates the attention both writers place on precise and exact specification.

> ---- (rarely / only on) and then only ----

Erdnase: will hold too many ONLY ON his own deal, AND THEN ONLY before the draw. [p115]
Sanders: is RARELY used for the inclines, AND THEN ONLY when posts are employed to form...
Erdnase: is practiced ONLY WHEN the player is alone [p113]
Sanders: is without doubt an excellent one WHEN, AND ONLY WHEN, the entire pressure upon...
---- to a degree ----
Erdnase: The art of card palming can be brought TO A DEGREE of perfection that borders on the wonderful. [p83]
Sanders: within a few days TO A DEGREE sufficient for all practical purposes.
---- any considerable ----
Erdnase: can be accomplished to ANY CONSIDERABLE extent [p65]
Erdnase: all men who play for ANY CONSIDERABLE stakes are looking for the best [p10]
Sanders: is not in itself sufficient to sustain ANY CONSIDERABLE thrust without a tendency...
Sanders: the discovery had brought together ANY CONSIDERABLE number of persons
Sanders: to A CONSIDERABLE DEGREE taken their place in architectural structures
---- precision ----

Erdnase: PRECISELY the same movement is made as in taking off a small packet by the ends [p75]
Erdnase: it brings the dealer's set in PRECISELY the same position as the first shuffle [p114]
Sanders: huge timbers that have been frames with the UTMOST PRECISION
Sanders: Where the framing of timbers for support is a matter of the UTMOST PRECISION
---- proportionately ----

Erdnase: the action and time are shortened PROPORTIONATELY [p81]
Sanders: and thereby weakens the pieces at such points PROPORTIONATELY
---- to some extent ----

Erdnase: prearranging TO SOME EXTENT for his deal. [p60]
Erdnase: TO SOME EXTENT with that chance in view. [p109]
Erdnase: without employing the prearranged deck TO SOME EXTENT [p185]
Sanders: although altered TO SOME EXTENT by the influence... [MHS-vol7]
Sanders: and the grades will be necessarily mixed TO SOME EXTENT. [SMR]
Sanders: classified TO SUCH AN EXTENT as will greatly aid those who desire... [MHS-lib]
---- such conditions ----
Erdnase: Will they endure SUCH CONDITIONS?
Sanders: successfully employed to meet just SUCH CONDITIONS in swelling ground. [MT]
Sanders: Under SUCH CONDITIONS the use of full-length wall plates is impossible, [MT]
---- under ordinary conditions/circumstances ----

Erdnase: to perform what UNDER ORDINARY CIRCUMSTANCES would be a very difficult [p201]
Sanders: UNDER ORDINARY CONDITIONS the L shaft should never be employed... [L1-1906]
---- at some other point ----
Erdnase: but of course hesitating AT SOME OTHER POINT. [p166]
Sanders: and another shape or construction more suitable AT SOME OTHER POINT
---- without/little heed ----

Erdnase: while the deck is being shuffled apparently WITHOUT HEED or design. [p20]
Sanders: seldom takeup a pen for writing and pay LITTLE HEED to letters [MHS-lib]
---- all the various ----

Erdnase: insist that ALL OR ANY OF THE VARIOUS methods of executing it [p125]
Sanders: ALL THE VARIOUS newspapers... [MHS-lib]
---- the various conditions----
Erdnase: in describing THE VARIOUS processes and CONDITIONS [p25]
Sanders: If THE VARIOUS CONDITIONS under which the different shapes are best suited to...

Erdnase: It is not our purpose to describe THE VARIOUS KINDS of apparatus [p171]
Sanders: THE VARIOUS KINDS of earthworks that must receive natural
---- various methods----
Erdnase: insist that all or any of the VARIOUS METHODS of executing it [p125]
Sanders: is filled into them by VARIOUS METHODS of procedure.
--- almost universal belief/acceptance ----
Erdnase: the ALMOST UNIVERSAL BELIEF that none but the unsophisticated can be deceived... [p21]
Sanders: are now ALMOST UNIVERSALLY ACCEPTED as affording the greatest possible strength
---- almost invariably ----

Erdnase: It is ALMOST INVARIABLY done quite openly, and in company where... [p18]
Sanders: but round timbers for the level workings are ALMOST INVARIABLY shaped by hand

## 5) Excellence

## Prev Next Table of Contents

Both Sanders and Erdnase have a respect and almost reverence for [Excellence]. In publishing Montana historical documents, Sanders explicitly states being "sincerely desirous to maintain a HIGH STANDARD OF EXCELLENCE for the series of books." We group the examples as follows:

- Excellence generally. Or in performance or [methods] (e.g., "simple and easy" or "practical") as well as the inferiority of other methods (e.g., "cumbersome");
- [Education] as a means to excellence
- [Honor] and [Aesthetics] ("grace" "pleasing effect" etc) as specific domains of excellence.

There is also overlap with the theme of [Rigor/precision] in words like "utmost" and "perfect" (over 70 occurrences in Erdnase) that imply both [Excellence] and [Rigor/precision]. And there is overlap with the theme of [Methods] in the repeated claims for the superiority and excellence of particular methods.

It is also significant that this regard for excellence is highlighted in the title of The Expert at the Card Table. The term expert appears over twenty times in the body of the book. Similarly, Sanders uses the term a half a dozen times or more while describing the occupations of his classmates. And as mentioned, the concern for expertise carries over into the subtheme of [education]. It is also worth mentioning that Sanders, himself, was considered "one of the greatest copper experts of the West." [Tonopah Bonanza, Aug 17, 1907]

In addition, when aggregated, even common words can reveal something. For example, while the use of a word like utmost doesn't imply much linguistically on its own, the large number of such references (along with related words such as perfect, excellent, etc) indicates a reverence for perfection and the artistic heights that accompany it. Some terms related to evaluating excellence that are widely used by both Erdnase and Sanders: satisfactory, perfection, utmost, worthy, greatest, advanced, superior, by far, excellent, post-graduate, best, simplest, grace, artistic, pretty, novel, artistic, inartistic, artlessness, contrivance, honorable, upright...
[excellence (or lack of) in methods... and superlatives more generally]
**** ---- MOST $x$ and y MACHINE/DEVICE EVER/YET CONSTRUCTED ----
Erdnase: the MOST novel AND perfect MACHINES EVER CONSTRUCTED [p15]
Sanders: the simplest AND MOST easily manipulated DEVICE YET CONSTRUCTED
Erdnase: the MOST subtle AND ingenious gambling GAMES EVER DEVISED [p117]
Erdnase: one of the most most NOVEL and perfect machines ever CONSTRUCTED makes [p15]
Sanders: it consists of the NOVEL features of CONSTRUCTION... [Patent]
**** ---- the greatest advantage ----
Erdnase: if requested to determine from what single artifice THE GREATEST ADVANTAGE is derived we would unhesitatingly decide... [p23]
Sanders: the plan above described may be of THE GREATEST ADVANTAGE in blocking-out the ores...
**** ---- to attain/maintain a high standard/degree of excellence ----
Erdnase: TO ATTAIN THE HIGHEST DEGREE OF EXCELLENCE at card manipulation much study and practice are necessary [p24]
Sanders: being sincerely desirous TO MAINTAIN A HIGH STANDARD OF EXCELLENCE for the series of books [mhs-vol2 intro]
**** ---- system/device is CUMBERSOME and menace/expensive ----
Erdnase: the expert professional disdains THEIR [holdouts] assistance. They are CUMBERSOME, unnecessary, and a constant MENACE to his reputation. [p15]
Sanders: This SYSTEM of shaft timbering is the SIMPLEST and often the cheapest in use but it becomes

Erdnase: in this respect is that the really clever card-handler can dispense with the ENDLESS DEVICES AND PREPARATIONS that ENCUMBER the performer in other branches.

Sanders: their traditions of heroism amidst the encircling MENACE of angry hordes [CR bio]
**** ---- contrivances/makeshifts (the lack of excellence) ----

Erdnase: Many mechanical CONTRIVANCES termed "hold outs" [p14]
Erdnase: and will dispense with such MAKESHIFTS as "cold decks" or any kind of prepared cards. [p19]
Sanders: and all other CONTRIVANCES whatsoever
Sanders: the various other CONTRIVANCES in use for enabling the timbers to come together [MTE]
Sanders: the accommodation of CONTRIVANCES connected with the drainage [L1-1906]
****---- best/easiest/simplest/cheapest method ----
Erdnase: the BEST AND SIMPLEST METHODS of accomplishing the sleights [p24]
Sanders: being the SIMPLEST AND CHEAPEST METHOD OF framing
Erdnase: method of stocking which has just been explained is very SIMPLE AND EASY to understand [p68]
Erdnase: This change is one of the SIMPLEST AND EASIEST feats [p149]
Erdnase: The action is very SIMPLE AND EASY to execute, [p40]
Sanders: these bolts are the SIMPLEST AND MOST EASILY manipulated device yet constructed
---- with incredible/remarkable rapidity ----
Erdnase: a practiced operator can run up one or two hands WITH INCREDIBLE RAPIDITY [p61]
Sanders: drawing the sap upward into the top and drying the wood WITH REMARKABLE RAPIDITY
---- (by far the more/most | the most perfect | utmost | superior | ...) ----
Erdnase: this method IS NOW BY FAR THE MORE prevalent among men who play for money [p21]
Erdnase: The riffle...IS BY FAR THE MORE prevalent method in use among regular card players. [p33]
Sanders: this station, while requiring more excavating to construct, IS BY FAR THE MOST economical in the end
Erdnase: THE MOST PERFECT shift ever devised [p135]
Sanders: One side or face, therefore, is selected - THE MOST PERFECT and even one
Erdnase: acquiring perfect ability to run the whole deck through in this manner with THE UTMOST rapidity [p26]
Erdnase: An expert can run the whole deck with THE UTMOST rapidity [p58]
Sanders: huge timbers that have been frames with THE UTMOST precision
Sanders: whose opinions on this subject are entitled to THE UTMOST attention [MHS-vol7]
Erdnase: believe them VASTLY SUPERIOR to others that have come under our observation. [p14]
Erdnase: is INFINITELY SUPERIOR to the common method of inserting [p27]
Sanders: such a construction is considered to be SUPERIOR in strength to the circular form.
---- Other, non-matching, superlatives... ----
Erdnase: the ACME of ingenuity and mechanical skill has been reached [p18]
Erdnase: the ACME of control [p197]
Sanders: FAR IN ADVANCE of that in use among the older and less progressive mining communities.
Sanders: and represents THE MOST ADVANCED timbering in use.
---- Sanders sometimes uses superlatives ironically, as in his humorous description of a classmate. ----
Sanders: lifted to that UTMOST PINNACLE of human ecstacy - to be a graduate of the Columbia School of Mines, in the Class of '85. [CR bio]
---- culminate ----

Erdnase: The passion CULMINATES in the professional. [p9]
Sanders: they were to CULMINATE in the building up of a Commonwealth [MHS-vol7]
---- an excellent one ---
Erdnase: The first described is AN EXCELLENT ONE for retaining either the top or bottom stock [p39]
Erdnase: The position is AN EXCELLENT ONE for ordinary dealing, and should never be changed. [p54]
Erdnase: The latter position is AN EXCELLENT ONE [p134]
Sanders: this joint is without doubt AN EXCELLENT ONE

## [excellence and respect for education/knowledge]

**** ---- take a post-graduate course in a field/vocation. ----
Erdnase: to TAKE A POST-GRADUATE COURSE in the highest and most artistic branches of his vocation [p3]
Erdnase: However, THE POST-GRADUATE in the art is quite conscious of the fact [p21]
Sanders: during the following year he TOOK A POST-GRADUATE COURSE in Civil Engineering [CR bio]

[^0]Both writers describe knowledge in terms of a curriculum consisting of constant daily study or observation. They also focus on the importance of details and practical personal experience.

In referencing the color-coded semantic roles shown above, both authors use many of the same terms (curriculum, practical, observation, knowledge, study, details) as well as other words and phrases pointing to the same underlying meaning.
---- curriculum ----
Erdnase: essential to the curriculum of artistic card handling [p25]
Sanders: The courses we poured over, the studies over which we burned the midnight oil, the subjects of the curriculum,
---- constant study and observation of details ----
Erdnase: After the awakening our education progressed through close application and constant study of the game, and the sum of our present knowledge is proffered in this volume [p14]
Erdnase: the exact manner in which they are executed...believe them vastly superior to others that have come under our observation. [p14]
Erdnase: Importance of details. - The finished card expert considers nothing too trivial [p25]
Sanders: he will miss the myriad details which daily observation gives [mhs-vol2 intro]
Sanders: The courses we poured over, the studies over which we burned the midnight oil, the subjects of the curriculum,
---- learning/knowledge only possible through personal or practical experience ----
Erdnase: Our tuition was received in the cold school of experience. [p14]
Erdnase: This knowledge, or thorough comprehension of the possibilities of professional card playing, can be imparted only by practical illustration of the processes employed [p12]
Sanders: he will lack that personal knowledge essential to give to his opinions the remotest value. [mhs-vol2 intro]
Sanders: we gained by practical observation much valuable knowledge of our future chosen work,
Sanders: Preliminary training of a practical nature is an indispensable part of the equipment of the successful operator
Sanders: from long association competent to speak from personal knowledge
---- varied experience ----
Erdnase: A varied experience has impressed us with the belief that all men... [p10]
Sanders: From the winter of ' 88 until the fall of ' 90 a somewhat varied experience as expert in twine manufacture [CR bio]

We can also hear echoes of Erdnase in this excerpt from Sanders about the life of a mining engineer, where the metaphorical "COLD school" becomes literal as "ARCTIC COLD" in the context of gambling ("THE GAME") being an integral part of a miner's experience.

Erdnase: Our TUITION was received in the COLD SCHOOL of experience. [p14]
Sanders: you QUIT THE GAME our mining engineers have played, Through ARCTIC COLD and tropic flame

- See also "for practical purposes" for more on the theme of theory vs practice.
**** ---- Relationship with knowledge
---- our/my early knowledge ----
Erdnase: we sorrowfully admit that OUR OWN EARLY KNOWLEDGE was acquired... [p10-11]
Sanders: From MY EARLY KNOWLEDGE of you [CR poem]
---- a thorough knowledge ----
Erdnase: supplemented by A THOROUGH KNOWLEDGE of "blind" cutting [p21]
Sanders: who possessed A THOROUGH KNOWLEDGE of the aboriginal peculiarities and
characteristics [MHS-vol2 footnote]


## ---- a certain/probable of knowledge ----

Erdnase: A CERTAIN KNOWLEDGE that his more respected brother... [p10]
Sanders: A PROBABLE KNOWLEDGE of the town Montana.
---- intimate/definite acquaintance/associations ----

Erdnase: An INTIMATE ACQUAINTANCE with the modus operandi of card table artifice [p11]
Sanders: the INTIMATE ASSOCIATIONS which in youths of generous minds form a mutual regard
Sanders: and, furthermore, a DEFINITE ACQUAINTANCE with the upper Missouri country is assured
in the certainty with which...
---- an understanding $\backslash$----
Erdnase: It is not difficult if A PROPER UNDERSTANDING of the action is obtained [p140]
Erdnase: to obtain AN UNDERSTANDING of its fundamental principles, [p194]
Sanders: definite information as to that name, the word "Montana," or an UNDERSTANDING as to its actual significance...
Sanders: with this UNDERSTANDING the qualifying word mountainous will be employed as a noun, properly and logically to signify,

In this example both writers specify the exact number of students in an educational environment and how those members possess special and promising traits for their future development.

Erdnase: Moreover, I have discovered in my efforts to EDUCATE my FIFTY-TWO PUPILS, that they, like the members of any other family, POSSESS certain INDIVIDUAL CHARACTERISTICS OR TEMPERAMENTS, and I have endeavored to DEVELOP the SPECIAL TALENTS of each, in the direction most in keeping with the NATURAL BENT. [p191]
Sanders: the CLASS itself and its MEMBERSHIP, it may be said that 94 LADS were gathered from the four corners to MATRICULATE at its organization...who POSSESSED a PERSONALITY of SINGULAR CHARM and high PROMISE

Erdnase: the INTELLIGENCE and agility the Jacks POSSESS [p192] Sanders: whatever, in our modesty, we may state as to the POSSESSION OF BRAINS. [CR bio]

Erdnase: It is necessary to put SOME LITTLE BRAINS into so simple a problem as adding two and two [p80]
---- intellectual/literary faculty (faculty as mental capability) ----
Erdnase: by failing to fathom the subtlety of some lady's INTELLECTUAL FACULTY [p190] Sanders: highly INTELLECTUAL people, but among them there was a signal lack of the LITERARY FACULTY [mhs-vol2 intro]
---- (develop/draw into) natural talent ----
Erdnase: I have endeavored to DEVELOP the special TALENTS of each, in the direction most in keeping with the NATURAL bent. [p191]
Sanders: coupled with his NATURAL mathematical TALENT, he was DRAWN INTO bridge and structural engineering as his life work. [CR bio]

Erdnase: how an original ATHLETIC TENDENCY that was EARLY MANIFESTED by them has been DEVELOPED by a system of TRAINING, until they have acquired a degree of skill... [p191]
---- road to success ----
Erdnase: the student will be fairly established on the ROAD TO SUCCESS, and have overcome by far the greatest difficulty. [p80]
Sanders: while the story is easy to relate, the ROAD at times has been a hard one to travel, but abundant SUCCESS seems to have been the reward. [CR bio]
---- enlightenment ----
Erdnase: inspire the crafty by ENLIGHTENMENT on artifice. [p3]
Erdnase: benefit of the UNENLIGHTENED or curious reader we shall describe [p16]
Sanders: the various objects which might serve TO ENLIGHTEN us upon the Archaeology and... [MHS-lib]
Sanders: home of an advanced and ENLIGHTENED civilization [MHS-lib]
Erdnase: After THE AWAKENING our education progressed through close application and... [p14]
---- the art [field of knowledge, as in "state of THE ART"] ----
Erdnase: Although many professors of THE ART vehemently deny the imputation... [p185]
Sanders: in any of the ways known to THE ART [Patent]

## [excellence in aesthetics and merit]

**** ---- produce/present a PLEASING effect/appearance ----
Erdnase: never fails in PRODUCING a most PLEASING and BRILLIANT EFFECT. [p188]
Sanders: when thus PLACED the PASSAGE PRESENTS a PLEASING APPEARANCE.
In addition to parallel syntax, meaning, and word choice (produce pleasing effect $\leftrightarrow$ present pleasing appearance), note also the common use of alliteration on the letter $\mathbf{P}$ in both. For Sanders, this is reinforced by the additional words (placed and passage) and the $\mathbf{P}$ in appearance. And in Erndase by the near alliteration on the $\mathbf{B}$, which is a bilabial plosive like $\mathbf{P}$.
**** ---- wonderful facility/grace ----

Erdnase: it can be executed with WONDERFUL FACILITY [p67]
Sanders: He hez WONDROUS GRACE in hiz nether pegs [CR bio]
---- artistic/beauty/picturesque/splendid/grace (or not) ----
Aesthetic judgments are made with phrases like "very pretty" and "the beauty of" as well as terms such as "artistic", "splendid" and "grace." The particular overlapping words and phrases used in these examples are not particularly distinctive, but they they help illustrate the importance the two authors place on aesthetic excellence.

Erdnase: We think it is VERY PRETTY. [p154]
Erdnase: A VERY PRETTY true cut is made in the following manner. [p46]

Erdnase: This is a VERY PRETTY method of varying the deal, and [p56]
Sanders: it was a VERY PRETTY site, on the right bank of the Platte river
Erdnase: the BEAUTY OF the shift is in the natural and simple manner of palming the selected card
Erdnase: but the BEAUTY OF it is that if noticed it can be attributed to thoughtlessness.
Sanders: because of the exceeding euphonic BEAUTY OF the word, Montana is indeed foremost among the proud names of States

Erdnase: most ARTISTIC branches of his vocation [p3]
Erdnase: the curriculum of ARTISTIC card handling. [p25]
Erdnase: when making his own discard, is INARTISTIC, and risky, [p115]
Sanders: that from their very ARTLESSNESS and ingenuousness should convince...
Sanders: mining report that is less PICTURESQUE, less unique
Sanders: the not less PICTURESQUE nor less barbaric trappers
Erdnase: But this is a SPLENDID change for many purposes. [p151]
Sanders: largest and most SPLENDID ship of the armada
Erdnase: and such BUNGLERS must learn to handle a deck GRACEFULLY before attempting a flight to the HIGHER BRANCHES of card manipulation. [p22]
Erdnase: when the action is GRACEFULLY executed without either haste or hesitation [p37]
Erdnase: with any degree of GRACE or SMOOTHNESS, [p37]
Sanders: He hez wondrous GRACE in hiz nether pegs, when he pir-hoo-etts on hiz rear hind legs
Sanders: we cheer good lad your heart of GRACE, your pride that ne'er has halted. [CR poem]
Sanders: so GRACELESS a character (and punster) as Cozzens. [CR bio]
---- artistic/delightful/fine VOCATION [education + aesthetics] ----

Erdnase: in the highest and most ARTISTIC branches of his VOCATION [p3]
Sanders: your successes do DELIGHT US in the work of your VOCATION [CR poem]
Sanders: engaged in the DELIGHTFUL AVOCATION of underground work [CR bio]
Sanders: Where so FINE an AVOCATION? [CR poem]
---- (fascinating | many interesting) ----

Erdnase: Acquiring the art is in itself a most FASCINATING pastime [p127]
Erdnase: It is the most FASCINATING of layout games. [p18]
Sanders: but always the FASCINATING existence of the honest miner and the princely smelterman
---- The phrase "many interesting" (in context of writing/publishing)
Erdnase: the sleights employed in conjuring and MANY VERY INTERESTING card tricks. [p12]
Sanders: a library has been gathered which contains MANY valuable and INTERESTING works
Sanders: and MANY INTERESTING papers are thus obtained
**** ---- in every way better/worthy ----
Erdnase: It is IN EVERY WAY WORTHY of the practice necessary to acquire it [p134]
Sanders: good mining practice makes use of the framed set as being stronger and IN EVERY WAY BETTER.
Sanders: Here his work is WORTHY and WORTHILY done. [CR bio]
**** ---- test/convince (fair and impartial | fair minded unbiased) ----
Erdnase: gentleman in the audience who is desirous of giving my ability A FAIR AND IMPARTIAL TEST [p194]
Sanders: the following excerpts from the text will CONVINCE any FAIR MINDED UNBIASED mining engineer.
--- the real value of ----

Erdnase: He knows little of THE REAL VALUE OF money [p10]
Sanders: THE REAL VALUE OF the inclined-bottom bin lies in its facility of discharge
---- Another phrase also related to an appreciation on cost and value... ----
Erdnase: knowledge was acquired at the usual EXCESSIVE COST to the uninitiated. [p11]
Sanders: because it does away with the ponderous and EXCESSIVELY COSTLY... [THESIS]
----- merit and propriety ----
Erdnase: the MERIT of the feat will be solely due to the mysterious properties [p176]
Sanders: and smile with friendly nod or frown in well-MERITED rebuke [CR bio]
Erdnase: they may be with more PROPRIETY, taken up into both hands and squared. [p114]
Sanders: as regards the undoubted PROPRIETY and fitness of the word Montana as a name employed [MHS-vol7]

## 6) Methods and practicality

## Prev Next Table of Contents

This technically-oriented theme involves the characterization of [methods], including their effectiveness and practicality. As such, it overlaps with the earlier themes of [rigor/precision] and [excellence]. Terms: employ, manner, method, difficulties,
system, process, advantageous, in practice, successful, etc. To some degree, these thematic terms and phrases are part and parcel of any domain focused on methods (such as sleight of hand or mining). However, by grouping these examples together, we can better appreciate the sometimes striking level of similarity in phrasing, word choice, and concept - far more than would be expected from the technical domains alone.

## **** ---- difficulties/objections OVERCOME BY THE USE OF XX which is YY ----

Erdnase: This OBJECTION is entirely OVERCOME BY THE USE OF the break, WHICH IS illustrated in the following blind shuffle [p31]
Sanders: this DIFFICULTY is OVERCOME BY THE USE OF a half right-angled miter, of 45 deg., WHICH IS framed from the face of the timber...

## **** ---- difficulties OVERCOME BY knowledge/understanding ---

Erdnase: When the positions and process are thoroughly UNDERSTOOD the main DIFFICULTIES ARE OVERCOME [p90]
Sanders: It is only by actual KNOWLEDGE in the handling of affairs that he is enabled to judge correctly of the conditions and to apply the proper remedies for OVERCOMING THE DIFFICULTIES that are continually arising.

Erdnase: and have OVERCOME by far the greatest DIFFICULTY. [p80]
Sanders: which DIFFICULTY may in a measure BE OVERCOME by diagonal spiling
---- difficulty is avoided ----
Erdnase: the DIFFICULTY of the twisting out process IS AVOIDED. [p163]
Sanders: the DIFFICULT and expensive construction of the sloping bottom bin IS AVOIDED.
**** ---- devising a system applicable to different variations ----

Both Erdnase and Sanders were innovative and "devised" systems (schemes, procedures) that provided general solutions for many "variations" and particular cases. Erdnase presents his own systems for palming, culling, etc. Sanders does similarly for mining, particularly in his Reference Scheme for Mine for Mine-Workings, where he describes a flexible system for annotating and documenting the various locations and components involved in mineworking. And Sanders, as noted earlier, had a couple patents issued in his name.

In the examples below, both authors describe these systems and their applicability to a variety of situations. The examples elaborate on this central theme in different ways, reflecting its importance to both authors. The different semantic roles are color-coded to show the close alignment in meaning. Unlike most of the other examples in this document, the actual word choice and phrasing is not the main focus here, though there are some lexical overlaps (e.g. the words "devise", "variation," and "system").
--- a procedure/scheme/plan/system devised to be applied to different variations/situations/conditions
Erdnase: we believe them [system of palming] to be the most rapid and subtle ever devised. [p83] Sanders: A simple and symmetrical yet expansive SYSTEM of classification must be devised

Erdnase: the procedure is the same...for the stocking of any number or kind, with slight variation in the calculation. [p75]
Sanders: A simple and symmetrical yet expansive system of classification must be devised, one that is capable of being extended to cover all possible exigencies and conditions of future operations within the property.

Sanders: the above reference scheme...can be applied to the workings of any and all other classes of mineral deposits, with such variations in its details as may be necessitated by...
Sanders: The plan must be such in principle that it may be made to apply to all classes of underground mining
Similarly, both authors point out the difficulty, when discussing their systems, of a providing a single formula or description to cover all situations/cases...
--- it is impossible/cumbersome to give/write out a formula/description for all cases
Erdnase: It is impossible to give a formula that will answer for every situation. There is no end to the variety of positions the desired cards may be in. [p80]
Sanders: To write out in full a sufficient description of any particular locality or working of a mine, or even to explain the locations from which a lot of samples have been taken, would be far too cumbersome for practical purposes.

## **** ---- may be employed advantageously under (special circumstances | all conditions) ----

Erdnase uses the term "employ" 44 times. It is often pointed to as a "signature" word for him. Significantly, Sanders also uses it extensively, over 30 times in Mine Timbering alone. The first example below is especially notable. The five word phrase "may be employed advantageously under" has no hits on Google N-Gram viewer (of books indexed from the 1800s to the present) and only a half dozen or so hits in regular Google search, half of which are related to Erdnase. And, in addition to the exact five word match, there's further alignment of meaning in the extended phrase. In particular, Sanders and Erdnase both qualify its applicability with respect to the conditions or circumstances.

Erdnase: we shall describe several processes that MAY BE EMPLOYED ADVANTAGEOUSLY UNDER SPECIAL CIRCUMSTANCES. [p144]
Sanders: Such shafts are particularly well adapted to firm ground, but they MAY BE EMPLOYED
ADVANTAGEOUSLY UNDER ALL CONDITIONS, EXCEPT WHERE... [L1-1906]
Here are some other ways they use the word in common:
---- employed in connection with ----
Erdnase: and it is EMPLOYED almost exclusively IN CONNECTION WITH marked cards [p58]

Sanders: a word that is very generally EMPLOYED IN CONNECTION WITH the adjective montanus... [MHSvol7]
---- may be employed with great success/benefit ----
Erdnase: shift that MAY BE EMPLOYED WITH the GREATEST probability of SUCCESS [p99] Sanders: and it MAY BE EMPLOYED WITH GREAT BENEFIT
---- generally employed ----
Erdnase: A third way, and the most GENERALLY EMPLOYED [p114]
Sanders: now so GENERALLY EMPLOYED among the metal mines
---- commonly employed ----
Erdnase: The mode of shuffling over and under the left hand packet is COMMONLY EMPLOYED, and incites no notice. [p161]
Sanders: superseding in large measure the earthy and timber supports that are COMMONLY EMPLOYED in the deep workings
---- usually employed ----
Erdnase: it is USUALLY EMPLOYED TO receive and bring a selected card to the top [p130] Sanders: As USUALLY EMPLOYED it requires little framing
---- successfully employed ----
Erdnase: EMPLOYED with the greatest probability of SUCCESS at the card table [p99]
Erdnase: to EMPLOY a machine SUCCESSFULLY requires considerable address [p15]
Sanders: SUCCESSFULLY EMPLOYED to meet just such conditions in swelling ground. [MT]
---- methods employed ----
Erdnase: the several METHODS EMPLOYED appear the same as those in common every-day usage. [p164] Sanders: may METHODS of framing the joints have been EMPLOYED and many forms of joints used.
---- (process) ... employed ... (for the/this purpose) ----
Erdnase: In this PROCESS an entirely different subterfuge IS EMPLOYED, and it is probably the most ingenious ever devised FOR THE PURPOSE [p149]
Sanders: For this purpose the PROCESS known as spiling or forepoling IS EMPLOYED
Sanders: with some form of the v-tenon IS EMPLOYED FOR THE PURPOSE of dividing the cross-sectional area
**** ---- There would/can be little advantage...if/were (conditional) to be ----

Erdnase: THERE WOULD BE LITTLE ADVANTAGE derived from clever shuffling, WERE the order TO BE subsequently disturbed in cutting [p39]
Sanders: THERE CAN BE LITTLE ADVANTAGE to the profession at large IF the discussion as to the best shape for a shaft is TO BE... [L1-1906]
**** ---- be successfully worked [transitive use of "work"] ----

Erdnase: The methods described can BE SUCCESSFULLY WORKED with as many as eight or ten cards [p115]
Erdnase: we shall describe an exception that is at times WORKED SUCCESSFULLY [p114]
Sanders: from the deposits too small to BE SUCCESSFULLY WORKED in a commercial way
Erdnase: The top card is brought to the bottom by a ruse WORKED in connection with the Blind Cut [p103-104]
Erdnase: Some ARE WORKED by arm pressure [p15]
Sanders: the face HAS BEEN WORKED to line with the assumed plane
Sanders: the selected face IS WORKED to straight-edges, sighting
Sanders: and the valve (slide) IS WORKED INDEPENDENTLY by a separate machine [SMR]
("successfully worked" gleaned from from Carlo Morpurgo's overlapping sequences)
**** ---- the entire work (should be) done ----
Erdnase: THE ENTIRE WORK SHOULD BE DONE by the second fingers and thumbs. [p38]
Sanders: and THE ENTIRE WORK DONE during admission and expansion [THESIS]
Ease of methods
Erdnase and Sanders use similar linguistic constructs as they highight the ease or difficulty of the actions or methods they describe.
**** ---- without inconvenience ----
Erdnase: The bottom palm may be held while the deal is in progress WITHOUT INCONVENIENCE. [p93] Sanders: leaves sufficient hight for passage WITHOUT INCONVENIENCE.
---- without X or Y ----
Erdnase: while the deck is being shuffled apparently WITHOUT HEED OR DESIGN. [p20]
Erdnase: The stock must be run up WITHOUT HURRY OR HESITATION [p73]

Sanders: usurped WITHOUT INVITATION OR CONSENT the most responsible and solemn... [MHS-vol2 intro]
Sanders: that is, WITHOUT BEND OR TWIST as regards both its length and breadth
---- other double (and triple!) negatives ----
Erdnase: NOT at all UNCERTAIN about your memory. [p195]
Erdnase: can be performed WITHOUT THE LEAST noise. [p102]
Erdnase: WITHOUT THE LEAST INCONVENIENCE. [p95]

- See also transitive no and double positives and unconcern
**** ---- the ease with which ----
Erdnase: To show THE EASE WITH WHICH the cards travel I shall [p187]
Sanders: and THE EASE WITH WHICH it may be manipulated [MTE]
****
---- comparatively simple/easy ----
Erdnase: it is COMPARATIVELY VERY SIMPLE to perform [p96]
Erdnase: This two-handed form of the shift is COMPARATIVELY VERY EASY to execute [p102]
Erdnase: a very short shift and COMPARATIVELY AN EASY ONE. [p130]
Sanders: removed and replaced with COMPARATIVELY LITTLE DIFFICULTY
Sanders: while being at the same time of COMPARATIVELY SIMPLE construction
**** ---- require (little or no | little if any) ----
Erdnase: LITTLE OR NO skill is REQUIRED, but a practiced hand can locate and bring the cards... [p62]
Sanders: shafts sunk in some localities REQUIRE LITTLE IF ANY timbering
Erdnase: There is LITTLE OR NO difficulty in performing this perfectly, AND the deal can be... [p94]
Sanders: large excavations may be supported with LITTLE OR NO timbering, BUT usually...
Erdnase: There is very LITTLE DIFFICULTY in acquiring the ability [p119]
Sanders: removed and replaced with apparently LITTLE DIFFICULTY [L1-1906]
Erdnase: Strippers may be used in Faro WITH LITTLE fear of detection [p18]
Sanders: or it may be chopped out WITH LITTLE trouble
Sanders: legal connections are looked upon WITH LITTLE favor by the average Mining Engineer;
Erdnase: It REQUIRES NO feat of memory [p73]
Sanders: this qualification, of itself, REQUIRES NO apology
---- can be readily ----
Erdnase: The percentage in their favor is a known quantity, or CAN BE READILY calculated
Sanders: The leaf jk CAN BE READILY applied to any flat-bottom bin already constructed
---- care being taken ----
Erdnase: CARE SHOULD BE TAKEN not to riffle the corners far [p163]
Erdnase: CARE MUST BE TAKEN to leave no crimp in the card. [p204]
Sanders: In framing the sets the UTMOST CARE IS TAKEN that the measurements shall be exact
---- facility ----
Erdnase: in acquiring FACILITY to push out the bottom card [p54]
Sanders: the real value of the inclined-bottom bin lies in its FACILITY of discharge
---- greatly aid ----
Erdnase: risks that are taken may AID GREATLY in lessening the casualties. [p11]
Sanders: will be classified to such an extent as will GREATLY AID those who desire to...[MHS-lib]
Sanders: Many of Montana's citizens find the collection A GREAT AID in looking up matters... [MHS-lib]
---- of great assistance ----
Erdnase: The little finger held at the middle of the end is OF GREAT ASSISTANCE in this shift [p129]
Erdnase: and it is OF VERY GREAT ASSISTANCE in card tricks. [p140-141]
Sanders: and is OF THE GREATEST ASSISTANCE to the officers of the mine


## Patterns/frequency of use

Erdnase and Sanders both take pains to point out how often or frequently a particular method or procedure is used. In doing this, they use similar linguistic constructs.
**** ---- rarely used/attempted [in a system] ... and/but ----
Erdnase: running down so many cards WILL RARELY BE ATTEMPTED, BUT it shows the possibilities of the SYSTEM. [p82]
Sanders: the halved SYSTEM of framing, as explained under vertical shafts, IS RARELY USED for the inclines, AND then only when posts are employed to...

Erdnase: Printed cards are manufactured, but these ARE RARELY USED by professionals. [p16] Sanders: the halved system of framing, as explained under vertical shafts, IS RARELY USED for the inclines...
---- are much used ----
Erdnase: Prepared cards known as Strippers ARE MUCH USED by certain players [p17]
Sanders: Circular shafts are but little employed in America, but they ARE MUCH USED in Europe [L11906]
---- in general use ----
Erdnase: It is probably the oldest and best IN GENERAL USE. [p97]
Sanders: which it would seem is likely to come INTO GENERAL USE
Sanders: which has brought the single-width construction INTO SUCH GENERAL USE. [L1-1906]
---- those in use ----

Erdnase: the several methods employed appear the same as THOSE IN COMMON EVERY-DAY
USAGE. [p164]
Sanders: the systems of timbering dealt with are THOSE IN USE among the mines of the mountainous regions
---- usually made ----
Erdnase: The cut is USUALLY MADE in this way [p110]
Sanders: yet there is a distinction USUALLY MADE in that the longer pair
---- the practice of XX ["practice" meaning "habitual action"]----
Erdnase: Some players make A PRACTICE OF marking cards during [p17]
Sanders: the modern PRACTICE OF balancing loads [L1-1906]
Sanders: good mining PRACTICE makes use of the framed set... [MT]
---- oftentimes success/failure ----

Erdnase: A daring and yet OFTENTIMES SUCCESSFUL ruse of overcoming the cut difficulty [p110]
Erdnase: The mode of cutting OFTENTIMES becomes a HABIT that is unconsciously followed. [p113]
Sanders: OFT-TIMES they DRAW THE RICHEST PRIZE, most OFTENTIMES GET BLANKS
Sanders: certain variations of these several joints are employed, OFTENTIMES TO ADVANTAGE...
Various locutions using "manner" (and related)

```
**** ---- in the same manner as described ----
```

Erdnase: The deck is held IN exactly THE SAME MANNER AS DESCRIBED for bottom dealing. [p56]
Sanders: have been brought to their places IN THE SAME MANNER AS has been DESCRIBED
**** ---- in much the same manner ----
Erdnase: The top palm can be made with the right hand IN MUCH THE SAME MANNER [p92]
Erdnase: right hand packet again on top IN MUCH THE SAME MANNER. [p163]
Sanders: near the center of the set IN MUCH THE SAME MANNER as are located the end posts or plates.
Erdnase: the coat sleeve of the magician is to him MUCH THE SAME as a Saratoga trunk to a summer girl [p185]
Erdnase: This brings the hands into MUCH THE SAME position
Erdnase: In this process the action is MUCH THE SAME
---- the manner in which ----

Erdnase: THE EXACT MANNER IN WHICH each artifice is performed is fully described in
Erdnase: THE EXACT MANNER IN WHICH it is performed [p52]
Erdnase: THE EXACT MANNER IN WHICH they are executed.
Erdnase: THE PARTICULAR MANNER IN WHICH the dealer forms the crimp, or jog
Sanders: knowledge as to THE MANNER IN WHICH it came to be selected and
Sanders: With regard to THE MANNER IN WHICH the word "Montana"
**** ---- accomplished in the following manner ---
erdnase: It can be ACCOMPLISHED IN THE FOLLOWING MANNER: [p62]
Sanders: the hole is now charged which is ACCOMPLISHED IN THE FOLLOWING MANNER as observed... [SMR]
---- may be accomplished ----
Erdnase: However, the tilting and tapping MAY BE ACCOMPLISHED without haste [p110]
Sanders: posts only are to be replaced it MAY BE ACCOMPLISHED by removing
**** ---- treated in this/similar manner...and operation/runs repeated/alternated ----

Erdnase: The four Aces are TREATED IN THIS MANNER, then turned end for end, and the OPERATION REPEATED. [p16]
Sanders: the other set is TREATED IN A SIMILAR MANNER and so are the RUNS WORKED
ALTERNATELY [SMR]
---- in like manner ----
Erdnase: the left-hand packet, which is brought down IN LIKE MANNER, and so on. [p104]
Sanders: to which is bolted IN A LIKE MANNER the plunger piece [THESIS]
---- in such a manner ----

Erdnase: the deck IN SUCH A MANNER that the most critical observer [p83]
Sanders: that they otherwise might IN SUCH MANNER as they would wish to.
---- this style of $x x$ is possible/preferable ----
Erdnase: which make THIS STYLE OF shuffle POSSIBLE [p125]
Sanders: THIS STYLE OF cylinder is PREFERABLE because it causes the whole of the weights [THESIS]
---- (change position) by means of ----
Erdnase: to bring the particular card to the middle of the deck BY MEANS OF a shift [p143]
Sanders: the sets are carried up along its slope BY MEANS OF the cap-sill
Suitability/necessity of methods
In these examples, the two authors highlight (in similar ways) the suitability or necessity of particular methods or procedures.
**** ---- indispensable for the (successful operator | professional player) ----
Erdnase: This artifice is erroneously supposed to be INDISPENSABLE to THE PROFESSIONAL PLAYER [p95]
Sanders: Preliminary training of a practical nature is an INDISPENSABLE part of the equipment of THE SUCCESSFUL OPERATOR

- See also THE + adj + noun (reified).
---- particularly adapted / well adapted ----
Erdnase: This method of blind cutting is PARTICULARLY ADAPTED for working in with the... [p44]
Sanders: Such shafts are PARTICULARLY WELL ADAPTED to firm ground [L1-1906]
Erdnase: it is equally WELL ADAPTED for retaining the top or bottom portion [p20]
Sanders: there are in use many methods WELL ADAPTED to keeping the workings open
---- best suited to ----
Erdnase: but he can pick up any card or group of cards in the order BEST SUITED TO his design [p82]
Sanders: come together from the six directions in a manner BEST SUITED TO the needs of the occasion.
---- if desired...may/can be made ----

Erdnase: IF DESIRED this shift CAN BE MADE with almost the whole deck [p132]
Sanders: These cribs MAY BE MADE solid IF DESIRED
---- this is not often/always...desired ----
Erdnase: but of course THIS IS NOT ALWAYS DESIRED. [p73]
Sanders: These cribs may be made solid if DESIRED, but THIS IS NOT OFTEN done,
---- THE ONLY proper/satisfactory (procedure) ... IS TO ----
Erdnase: THE ONLY PROPER way to practice IS TO be seated in the usual manner at a... [p24]
Sanders: THE ONLY SATISFACTORY remedy for this inherent weakness of square-shoulder framing IS TO make use of the mitered joint
---- for practical purposes ----
Erdnase: The possibilities of the riffle, FOR ALL PRACTICAL PURPOSES at the card table [p33]
Erdnase: and FOR PRACTICAL PURPOSES stocking more than three should not be attempted [p77]
Sanders: would be far too cumbersome FOR PRACTICAL PURPOSES [RSMW]
---- in practice ----
Erdnase: In theory it seems that this action will be very easily noticed. IN PRACTICE, if cleverly performed, it is almost impossible to detect. [pp147-148]
Sanders: IN PRACTICE certain variations of these several joints are employed, oftentimes to advantage, but the above discussion is intended to describe the PRACTICAL METHODS of framing the typical rectangular shaft set.

Sanders: Preliminary training of a PRACTICAL NATURE is an indispensable part of the equipment of the successful operator,

- See also practical education


## Various locutions using "method"

****---- improving old/well-known methods ----
Erdnase: Many professionals have attained their success by IMPROVING OLD METHODS, or inventing new ones [p14]
Sanders: and in IMPROVING UPON WELL-KNOWN METHODS already in vogue
---- contrasting old methods with new/modern methods ----
Erdnase: Many professionals have attained their success by IMPROVING OLD METHODS, or inventing NEW ONES [p14]
Sanders: the application of OLD METHODS to present use, while other systems are distinctly MODERN
---- the modern method/practice of ----
Erdnase: THE MODERN METHOD OF shuffling on the table [p28]
Sanders: THE MODERN PRACTICE OF balancing loads upon the hoisting engine [letter 1906]
---- methods of locating and *-ing ----

Erdnase: various METHODS OF LOCATING AND PRODUCING selected cards [p128]
Erdnase: A more artistic METHOD OF LOCATING and SECURING cards [p62]
Erdnase: ordinary METHODS OF stocking, LOCATING and SECURING [p60]
Sanders: the METHODS OF LOCATING AND ALIGNING the sets are those used for...
Sanders: the METHOD OF LOCATING the sets
---- THE USUAL method/practice/manner/ [...] plan/procedure/way/ (samples) ----
Erdnase: The USUAL METHOD of "forcing" is to bring the particular [p143]
Sanders: when the USUAL METHODS of timbering may be resorted to.
Erdnase: The USUAL PRACTICE is to deal from the bottom. [p83]
Sanders: the USUAL PRACTICE in the West being for each
Sanders: the USUAL PRACTICE being to make the inner faces of the station sets aline with those of...
Erdnase: bring it down IN THE USUAL WAY of shuffling on [p160]
Sanders: are hung IN THE USUAL WAY by lag-screws [L2-1906]
Erdnase: card with the thumb IN THE USUAL MANNER [p56]
Sanders: to afford secure support to the sets by blocking and wedging IN THE USUAL MANNER.
---- by this method ----
Erdnase: Two or more hands may be run up BY THIS METHOD [p66]
Sanders: BY THIS METHOD the frames can be so exactly dimensioned that...
Erdnase: and much time and labor are saved BY THIS PLAN. [p24]
Erdnase: and BY THIS EXPEDIENT overcomes the principal obstacle [p96]
Erdnase: ascertaining its suit and value BY THIS MEANS as he holds it poised in the right hand. [p182]
Details and problems of specific methods
Despite the different domains (sleight of hand and mining), the two authors often use the same or similar terms and phrases to describe the details associated with specific methods.
****---- roughen faces/surfaces to hold (together) ----
Erdnase: By ROUGHENING the FACES of some of the cards they will HOLD together [p18]
Sanders: SURFACES are ROUGHENED to aid in its HOLDING to the wooden end pieces
---- hold them in place ----
Erdnase: and HOLDING THEM IN PLACE by left little finger. [p85]
Sanders: the ends of the rungs being wedged to HOLD THEM IN PLACE.
Erdnase: just barely sufficiently to HOLD the deck IN PLACE, and when [p54]
Sanders: false timbers and lining must be used to HOLD the walls of the shaft IN PLACE.
---- held in position by ----
Erdnase: The in-jog card is HELD IN POSITION BY the little finger [p31]
Sanders: these sets are HELD IN POSITION BY distance pieces
---- in the same relative position ----

Erdnase: it leaves the top and bottom cards IN THE SAME RELATIVE POSITION
Sanders: both being placed IN THE SAME RELATIVE POSITION within the joint
---- bind/hold firmly together ----

Erdnase: the other fingers and thumb HOLDING the packet FIRMLY TOGETHER. [p135]
Erdnase: the first, second and third fingers HOLDING the cards FIRMLY IN PLACE [p144]
Sanders: in order to BIND the frames FIRMLY TOGETHER at this point
Sanders: only serves to BIND the set more FIRMLY TOGETHER
---- detriment ----

Erdnase: and the slightest friction is a DETRIMENT to perfect manipulation. [p25]
Sanders: the piston pounds on the cylinder head to the DETRIMENT of the machine. [SMR]
---- tendency to slip ----
Erdnase: the deck will have a TENDENCY TO SLIP towards the wrist [p54]
Sanders: with no TENDENCY TO split or SLIP
---- work in [idiomatic verb particle construction] ----
Erdnase: The cards may be shuffled with the utmost rapidity, or WORKED IN quite slowly [p69]
Sanders: to keep from the shaft material that otherwise might WORK IN at the corners.
--- used to locate ----

Erdnase: The break is USED when not shuffling, TO LOCATE any particular card or position [p27]
Sanders: The straight-edge alone is USED TO LOCATE the end plates
--- entirely dependent on/upon ----
Erdnase: tricks that conjurers make ENTIRELY DEPENDENT on the shift [p126]
Sanders: and DEPENDING ENTIRELY upon the will of the

## 7) Biographical allusions

## Prev Next Table of Contents

Several biographically related topics appear in the writings of both men. It is especially significant when Sanders writes about gambling and uses gambling-related terminology and metaphors. It is likewise significant when Erdnase references mining, archaelogy, historical preservation, and country life - all key biographical elements from Sanders' background as a mining engineer, Librarian for the Historical Society of Montana, and outdoorsman. In addition, Sanders' demonstrated interest in the derivation of words is mirrored in Erdnase.

## Gambling and deception

**** ---- Sanders on GAMBLING (poem to Johnson) ----
Sanders writes explicitly about gambling games in a poem to his classmate Johnson.

## Sanders:

Come, Johnson, cease your naughty ways,
Make simple faro, poker plays
Or roulette e'en, but stop this craze
For playin' the "Shell game."
However, Johnson, when I learn
The shell game played by your concern
Is not the western game I yearn
To see played on the square,
[...]
For reference, the following gambling-oriented terms are among those used by Sanders (sometimes figuratively) in his published writings: on the square, "make good," quit the game, honorable dealing, palm off, faro, poker, shell game, roulette. Others are found in his diaries.
**** ---- Sanders on MINING/GAMBLING ----
Sanders not only explicitly refers to gambling (in the above), but invokes gambling-related metaphors in connection with mining and its associated culture. Mining and gambling were strongly connected historically.

A report on "Saturday night in Butte" linked the psychology of mining to gambling, arguing that miners needed more intense thrills than other people did: "This excitement they are bound to have in one form or another, and if it is not to be found in the exploration of very promising looking croppings, the gaming table is resorted to as the best substitute." [Men, Woman, and Leisure in Butte, 1914-1941 by Mary Murphy].

Sanders, in a poem for his classmate Huntington, alludes to this aspect of mining culture. He says that Huntington "quit the game" when he left mining to settle down with a family and work in education. In addition, Sanders says that Huntington is "STRAIGHT and true," perhaps contrasting Huntington with the disreputable behavior in the mining/gambling game he quit. Sanders uses the same metaphor in a poem to his classmate Hollis, where he refers to Hollis as one who knows "the mining game." And Erdnase, himself, uses the same terms when he advocates quitting a game when under suspicion."

Erdnase: In most card GAMES...there is an old adage much quoted that runs, "If suspected, QUIT." [p78]
Sanders: [poem to Huntington]
So, Huntington, you QUIT THE GAME
Our mining engineers HAVE PLAYED...
How thoughtful, gentle, STRAIGHT and true
Sanders: [poem to Hollis]
As one who knows THE MINING GAME
From primal A to izzard...
He'd brave the cannon's mouth
When he some METAL CHASES.
And here's the kicker: both Sanders (in his tribute to Huntington) and Erdnase explicitly contrast other more RESPECTABLE PROFESSIONS (education and stock trading) with the wild delights, exhilerating influences, and rarely forgotten sensations associated with gambling and/or mining. These are the same intense thrills of gambling found in mining culture, as mentioned above.

Sanders: Huntington has placed taboo the WILD DELIGHTS AND EXHILERATING INFLUENCES of the MINING PROFESSION and settled into the more prosaic, even if MORE RESPECTABLE, calling of education. [CR bio]

Erdnase: have impressed the PROFESSIONAL CARD PLAYER with a certain knowledge that his MORE RESPECTED brother of the stock exchange possesses... Hazard at play carries SENSATIONS that once enjoyed are RARELY FORGOTTEN [p10]

For both Sanders and Erdnase, danger is a key part of the thrill and allure of gambling. Erdnase writes of how he "bucked the tiger" and lost his money. Sanders employs a similar danger-laden image in describing how Hollis, his classmate and fellow mining engineer, would "brave the cannon's mouth" in the context of pursuing of money (metal) in "the mining game." Both metaphors suggest a foolhardy courage and visually evoke the extreme perils of the cannon's mouth and the tiger with its huge jaws, and the ferocious roar of both - all in the context of chasing money.

Erdnase: We BUCKED THE TIGER voluntarily, and censure no one for the inevitable result. A self-satisfied unlicked cub with a FAIRLY FAT BANK ROLL was too good a thing to be passed up. [p14]

Sanders: As one who knows THE MINING GAME / From primal A to izzard [...] / HE'D BRAVE THE CANNON'S MOUTH / When he some METAL CHASES. [CR poem]

There is one more example of Sanders possibly alluding to cheating at the card table. In a poem about a college classmate, who became a librarian, he refers to marking cards. While at a literal level these are cards in a library's card catalog, the phrase also suggests the marked cards used to cheat in gambling. Even assuming he wanted to use the word "cardage" for the rhyme scheme, it is perhaps significant that Sanders chose to refer to "marking" them vs some other verb ("put/write/inscribe/etch/... it onto cardage") or some other way of describing it.

Sanders: And can tag all kinds of learning / And then MARK IT ONTO CARDAGE; [CR poem]
**** ---- Sanders on condition of hands ----
Given its relevance to sleight of hand with cards, we would expect Erdnase to mention the condition and other attributes of hands. And that is what we find, both in the text of EATCT and in Marshall Smith's recollections as told to Martin Gardner.

Erdnase: The beginner invariably imagines his HANDS are too small or too large, but the size has little to do with the possibilities of skill. Soft, moderately moist HANDS are best adapted for the purpose. When the CUTICLE is hard and dry, or excessively humid, the difficulties increase. A simple PREPARATION TO SOFTEN the HANDS and good general health usually produce the desired CONDITIONS. Of course dry FINGERS may be moistened, or damp ones dried, but either operation is objectionable. [p24]
Erdnase: We presume that THE LARGER, OR THE LONGER THE HAND, the easier it will be for a beginner to accomplish this shift, but a VERY SMALL HAND can perform the action when the knack is once acquired. [p101]

Smith: His hands were not large. He CALLED MY ATTENTION to them and I remember well FEELING THEIR SOFTNESS, much softer than any woman's hands I ever fussed with. He explained how HE TOOK CARE OF THEM and why. Was PROUD of them.
Smith: I mean he was proud of the job he made on his hands and not proud of his hands.
Smith (via Gardner): Smith recalls his HANDS very vividly. They were the SOFTEST HANDS he'd ever seen. Obviously he had done no heavy work or washed dishes. HANDS WERE SOFT like a woman's. He spoke good deal about how he had to keep them IN CONDITION
Smith (via Gardner): He remembers Andrews (sic) showing him some card tricks, and complaining that the cold made his fingers stiff. He remembers Andrews rubbing his hands together to warm them up, and telling him that it was necessary for him to KEEP HIS HANDS IN GOOD CONDITION. He said that he kept them greased.

We would not, however, expect a mining engineer to be as focused on hands, but that is what we find. Marty Demarest observes that Sanders, in his diaries, complains about the rheumatism and discomfort he felt from working in the cold ground in mining work. He was concerned about damage to his hands and called wheelbarrows "instruments of torture." The condition of hands was a subject of considerable interest to Sanders, as it was with Erdnase. And remarkably, as seen in Smith's recollections above and Sanders' writing below, it wasn't just an interest in hands but PRIDE in their condition (whether genuine or ironic) - so much so that the hands would be displayed
to others in order to show off their condition. In this case, Sanders writes about the hands of one of his classmates and how he showed them off with pride.

Sanders: He had been engaged in the delightful avocation of underground work, on a "lease," at Bannack, and the CONDITION OF HIS HANDS, then EXHIBITED with AMIABLE PRIDE, bore ample evidence that he knew well the joys of handling the shovel and "polishing the head of a drill" - good, hearty, wholesome work. [CRbio: Bemis]
Sanders: Of the days when you worked in the mines; On my life! Then the HORN ON YOUR HANDS was a wonderful sight. [CR poem: Bemis]

Sanders also vividly describes various other attributes of hands (often with humor and irony).
Sanders: And the bone-smashing GRIP OF YOUR PAW [CR poem]
Sanders: and up would go his HAND, WITH FINGERS popping like a bunch of firecrackers on a Celestial New Year. [CRbio: On "Pop" Starek]
Sanders: a wriggling, sinuous forward movement of the HAND with the INDEX FINGER advanced, much resembling the motion of a snake in crawling. [MHS-vol7]

In describing himself, Sanders refers to the wondrous grace in his nether pegs. In isolation, this could be construed as an allusion to the digital dexterity in his fingers. Though, in context, it is clearly referring to his legs and footwork in dancing. In either case, it further establishes his pride in his physical condition and abilities.

Sanders: He hez WONDROUS GRACE in hiz NETHER PEGS when he pir-hoo-etts on hiz rear hind legs [CR bio]

In the following examples, Sanders and Erdnase employ similar gambling or deception-related terms and phrases.

```
**** ---- Palming off ----
```

Erdnase uses the phrase "palm off" in its literal sense six times to refer to a particular sleight (palming). Sanders uses the phrase in its idiomatic sense to refer to covertly substituting inferior goods via trickery. There's no proof that Sanders had the literal sense in the back of his mind, but it is interesting to consider whether the choice of the phrase was influenced by a background in gambling, magic, and sleight of hand.

Erdnase: Should the performer wish to PALM OFF the selected card [p127]
Sanders: the literary huckster with his second-hand wares, has... usurped without invitation or consent the most responsible and solemn position which our civilization has created and in which every citizen has an interest, and has PALMED OFF upon us our own alleged history. [MHS-vol2 intro]

The derivation of the idiom "palming off" (from palming in sleight of hand) is described as follows. [Dictionary of Phrase and Fable - giving the derivation, source, or origin of common phrases, allusions, and words that have a tale to tell -- by E Cobham Brewer. 1870]

To palm off wares, tricks, etc, upon the unwary. The allusion is to jugglers, who conceal in the palm of their hand what they pretend to dispose of in some other way. These jugglers were sometimes called palmers.

Note that this source also defines "juggler."
Juggler means a player on a jongleur a sort of hurdy-gurdy. These jugglers accompanied the minstrels and troubadours, to assist them, and added to their musical talents sleight-of-hand, antics, and feats of prowess, to amuse the company assembled. In time the music was dropped as the least attractive, and tricks became the staple of these wandering performers.

A similar explanation was given in 1924. [Jean Newton in Evening Star. Washington DC. Nov 27 1924]
We are all familiar with this bit of slang which is frequently used in everyday speech to signify deception, whether it is inferior material that is being "palmed off" or a false excuse. The phrase comes to us from the parlance of the showman, the reference being originally to the juggler or "magician" who causes an article to disappear and then suddenly produces it in the palm of his hand. The "magician's" trade is an old one, and "palming off" is no upstart in the history of language. As far back as the early seventeenth century Dryden said: "you may palm upon us new for old."
**** ---- on the square [gambling slang] ----
Erdnase: it is generally dealt ON THE SQUARE in gambling rooms that are run openly [p18]
Sanders: Is not the western game I yearn / To see played ON THE SQUARE, [CR poem]
See here for additional context.
**** ---- quit the game [gambling slang] ----

Erdnase: In most card GAMES...there is an old adage much quoted that runs, "If suspected, QUIT." [p78]
Sanders: so, Huntington, you QUIT THE GAME / Our mining engineers have played, [CR poem]
See here for additional context.
---- honorable game/dealing ----
Erdnase: the ancient and HONORABLE GAME whose title furnishes the headline for this paragraph. [p117]
Sanders: the precepts towards HONORABLE DEALING and fair living...
---- Many more thematic variants on honesty theme. An example. ----
Sanders: and therefore mining was given up for the work of teaching the young idea how to shoot, to so bend the young shoot (as we understand it) as to incline the tree towards an UPRIGHT EXISTENCE. [CR bio]

Erdnase: and the game is sometimes dealt with STRAIGHT cards. [p118]
Sanders: how thoughtful, gentle, STRAIGHT and true [CR poem]
Sanders: and well we know, dear pal of old, / How STRAIGHT you are and true [CR poem]
**** ---- culled...fairly well ----
In this example, a distinctive word ("cull") is used in the same sentence as the collocation "fairly well." It is also possible that Sanders' choice of the word "cull" was influenced by its gambling connotations.

Erdnase: These examples of CULLING, if FAIRLY WELL executed. [p81]
Sanders: FAIRLY WELL filled with data CULLED in a measure from geologic reports... [ML1913]
**** ---- jog [noun] ----
Erdnase: When the blind shuffles with the coincident JOG and break -- [p126] 190 other occurrences
Sanders: in this way the JOG can be avoided [L1-1906]
**** ---- shrewd/keen/cunning/machiavellian ----
---- devising \{shrewd | keen | cunning | machiavellian\} \{strategm I ways to meet problems\} ----

Erdnase: This cunning and absolutely unfathomable stratagem must have been devised by an individual of truly Machiavellian subtlety.
Sanders: and their shrewd keenness in devising ways to meet the problems presented
---- keen eye/observation
Erdnase: impossible for the KEENEST EYE to detect the ruse [p120]
Sanders: he was nervous and active, of KEEN OBSERVATION... [MHS-vol2]
---- shrewd ----
Erdnase: We don't think many SHREWD players could be so imposed upon
Sanders: and their SHREWD keenness in devising ways to meet the problems presented
**** ---- furtive/covert/unnoticed glance ----
Erdnase: the operator might GLANCE AT IT WITHOUT BEING NOTICED [p31]
Erdnase: Now the operator LOOKS COVERTLY into the eyes of the spectator [p168]
Sanders: How with FURTIVE SIDE-GLANCE through the tail of the eye [CR poem]

## Derivation of linguistic terms

Both Sanders and Erdnase show substantial interest in the derivation, definitions, and application of words and names. This includes calling attention to cases when a word is commonly misused or a misnomer.
**** ---- Sanders and Erdnase on the derivation of linguistic terms ----

While librarian for the Historical Society of Montana, Sanders wrote an in-depth article on the derivation of the name Montana. And in his Columbia class reunion bios, he explicates the sources of the nicknames of his classmates. In addition, his mining articles also describe the derivation of terminology

Sanders: the WORD is an adjective form that is DERIVED FROM the noun mount or mountain. [MHS-vol7] Sanders: The side and end pieces ARE CALLED wall plates, FOR THE REASON that they frame the sides or walls of the shaft. [MT]
Sanders: making their way over to the headwaters of the Musselshell river, SO NAMED BECAUSE of the shells that are to be found along its banks. [MHS-vol7]
Sanders: Of Starek we remember the CAUSE which led to the NICKNAME by which he was known to us all that of "Pop" Starek. [CR bio]
Sanders: ERNEST JULIUS HYACINTH AMY...a name which served the double use of his COGNOMEN and our own mark of affection, for he was never known to us by his FRONT NAME or any of them.
Sanders: This DESIGNATION is now GENERALLY APPLIED to the plates of both the vertical and inclined shafts, although it is probable that the NAME ORIGINATED in connection with the timbering of the latter ...and this SIGNIFICANCE of the TERM was finally EXTENDED TO comprehend the similar longer plates of vertical shafts as well. [MT]
Sanders: The Shoshone Indians...were called the Gens du Serpent, a NAME SIGNIFICANT of the feelings entertained for that tribe... [MHS-vol7]
Sanders: According to Mrs. Ann Clark Thruston Farrar, and a niece of Captain William Clark...the final "e" was used or omitted at the pleasure of the writer. The NAME is frequently, and probably the MORE CORRECTLY, SPELLED without it...A SIMILAR MUTATION IN THE SPELLING OF NAMES is illustrated in many other instances beside this. - W. E. S. [MHS-vol2 footnote]

Erdnase displays a similar interest in the derivation and definitions of names and other terms. He mentions the likely source of the term "cold deck." He also takes time to describe the origins of names that he, himself, has invented.

Erdnase: The "Cold Deck" ... The NAME is probably DERIVED FROM the fact that the deck must await its opportunity long enough to contract a chill in the interim. [p18]
Erdnase: The Longitudinal Shift.-- This shift, for which we have to thank no one, is GIVEN A VERY LONG NAME ... [p135]
Erdnase: The S. W. E. Shift. We have not DUBBED the following process with OUR INITIALS because we
wish to appear "big on the bills," but merely to GIVE IT A NAME. [p134]
Erdnase: For some of the following tricks WE HAVE INVENTED NAMES [p172]
Erdnase: We USE THE WORD "honestly" IN THE SENSE that it MAY BE APPLIED to qualify any procedure in a game of chance [p117]

Both men also point out when a term is misused or is a misnomer
Erdnase: The Back Palm.-- We are afraid the above title is a MISNOMER. [p145]
Sanders: An adit, USUALLY MISCALLED tunnel throughout the West [MT]
Their interest in origins applies not only to words but to methods.
---- originated ----
Erdnase: methods following were ORIGINATED by us, and we believe [p25]
Erdnase: we must confess to some satisfaction in having ORIGINATED what we believe to be... [p134-135]
Sanders: square-set system of timbering was ORIGINATED to meet the needs of the situation
Erdnase: This IS KNOWN to conjurers AS the "Charlies Pass," and we presume WAS INVENTED by the famous magician of that name. [p128]
Sanders: are but the application of OLD METHODS to present use, while other systems are distinctly modern, both in ORIGIN and application.

In addition, both authors take care when introducing new terminology and use similar phrasing in doing so.
---- might (well) be termed ----
Erdnase: This example MIGHT WELL BE TERMED a fancy cull [p82]
Sanders: from the extraction of ores with what MIGHT BE TERMED open blocks...
Sanders: by what MIGHT BE TERMED an enclosing and protecting shield
Erdnase: Many mechanical contrivances TERMED "hold outs" have been invented. [p15]
Erdnase: We should mention that a shift is TERMED by the conjurer a "pass." [p128]
Sanders: The TERM "Earthworks," in its broadest sense, includes many...
---- known as ----
Erdnase: Prepared cards KNOWN AS "Strippers"... [p17]
Erdnase: The winnings KNOWN AS "pretty money," [p10]
Erdnase: This IS KNOWN to conjurers AS the "Charlies Pass," [p128]
Sanders: by what is KNOWN AS the diagonal brace...
Sanders: while the square pieces are KNOWN AS "girts"
Sanders: and which are KNOWN AS "end plates," or briefly "ends."

- See also combination of letters and the section on Wordplay.


## Archaelogy, mining, and history

## **** ---- Erdnase on MINING and ARCHAEOLOGY (from "The Divining Rod") ----

The Divining Rod represents a remarkable confluence of Sanders' background and interests (mining and cultural preservation) into a single card trick.

Erdnase's patter centers on the conceit of prospecting for gold. This is something Sanders did in real life.
Erdnase: I have mapped out a plan of experiment and study that will in time, I trust, enable me to give once more to the world complete and scientific data for positively ascertaining the immediate whereabouts of such METALS AS GOLD, SILVER OR COPPER by a process as simple as the waving of a willow wand over the PROSPECTED AREA. [p175]

Both Erdnase and Sanders describe the search for hidden underground deposits.
Erdnase: DIVINING THE PRESENCE of water or metals that lay HIDDEN far under the ground [p175] Sanders: except in the case of PROSPECTING HIDDEN or BLIND deposits

In the same trick, Erdnase refers to archaeology and bemoans the wonderful arts from ancient times that were once possessed but are now lost. Sanders, in the 1890s, was Librarian for the Historical Society of Montana where he expresses the same sentiment, using the exact same terms (wonderful, possess, lost, archaeology) as well as close synonyms (ancients vs early dwellers, course of ages vs history).

Erdnase: It is a fact well known to ARCHAEOLOGISTS that many very WONDERFUL arts which were POSSESSED by the ancients have, through the course of ages, been COMPLETELY LOST to modern civilization. [p175]
Sanders: the various objects which might serve to enlighten us upon the ARCHAEOLOGY and Ethnology of the Northwest; and such narratives and relics as would be of future interest which deal with the lives and works of the early dwellers and travellers in this section or tend to illustrate some incident in history... What a vast mass of WONDERFULLY interesting and valuable material might be gathered. Already much from our past that we should POSSESS is IRRETRIEVABLY LOST to us [MHS-lib]

In addition to the above, this same romantic view of the distant past is reflected elsewhere in their writing, where they both invoke the term "ancient" as almost a talisman.

Erdnase: without giving some consideration to the ANCIENT and honorable game [p117]
Erdnase: The saying is as true as it is ANCIENT, and [p185]
Sanders: it is difficult to determine the exact limits of what in ANCIENT times were regarded as...

Sanders: where i see the ANCIENT affection burn
Sanders: in fellowship of ANCIENT days to meet each gladsome year
Erdnase evokes the same long view of history in one of his most memorable maxims:
Erdnase: The passion for play is probably as old, and will be as enduring, as the race of man.

## Country imagery and metaphors

Sanders grew up on the frontier and was an experienced hunter and outdoorsman. It is interesting that a substantial number of country-tinged metaphors and images show up in Erdnase's writing.

Erdnase: A self-satisfied UNLICKED CUB [p14]
Erdnase: FLUSH THE QUARRY [p19]
Erdnase: Proficiency in TARGET PRACTICE is not the sole qualification of the TRAP SHOOTER. [p22]
Erdnase: side of a BARN [p23]
Erdnase: or curtail the ANNUAL CROP of suckers; [p3]
Erdnase: at the dealer's customary GAIT. [p73]
Erdnase: performs his part with the SHEARS when the LAMBS come to market. [p10]
Erdnase: the trusting nature of a FLEDGLING [p14]
Erdnase: common HERD [p23]
Erdnase: a PRACTICED HAND can locate and bring the cards... [p62] [practiced hand ~ ranch hand ?]
Erdnase: The dog, the PONY, the elephant, and even the PIG, have all been carefully trained... [p191]

## 8) Miscellaneous linguistic constructions

## Prev Next Table of Contents

In addition to the thematic and topical correspondences listed in the sections above, there are a number of more neutral linguistic constructs and idioms that show up in both writers.
**** ---- it does not matter/detract in the least ----

Erdnase: IT DOES NOT MATTER IN THE LEAST when performing [p179]
Sanders: while IT DOES NOT DETRACT IN THE LEAST from the column. [SMR]
Erdnase: without IN THE LEAST suspecting the choice is influenced in [p142]
Sanders: the most powerful detonator known that is IN THE LEAST, safe to handle. [SMR]
---- matters little ----
Erdnase: In making the bottom palm IT MATTERS LITTLE whether one or several cards are palmed [p142]
Erdnase: The particular manner...MATTERS LITTLE if it is done in a natural manner [p51]
Erdnase: If the dealer's set is the highest of the three IT MATTERS LITTLE to him how the draw is made [p75]
Sanders: the size of the deposit MATTERS LITTLE if waste filling be used [MT]
Sanders: the slope of the body MATTERS LITTLE for the reason that [MT]
**** ---- purpose is sufficiently answered ---
Erdnase: His PURPOSE in that respect IS SUFFICIENTLY ANSWERED by keeping the desired cards... [p20]
Erdnase: Two or three coups in the course of an evening...are quite SUFFICIENT TO ANSWER ALL PURPOSES. [p19]
Sanders: the required information...IS SUFFICIENTLY ANSWERED in and by the workings of adjoining property [MT]
Sanders: iron bars and straps (iron) WHICH ANSWER TO THE SAME PURPOSE as the iron frame. [SMR]
Sanders: It is probable that the single-shanked bracket would be SUFFICIENT FOR ALL PURPOSES [1906L2]
---- best/sufficient for all purposes ----
Erdnase: The BEST FOR ALL PURPOSES is as follows:
Sanders: It is probable that the single-shanked bracket would be SUFFICIENT FOR ALL PURPOSES [1906L2]
**** ---- for the purpose of illustrating ---
Erdnase: select the four Jacks FOR THE PURPOSE OF ILLUSTRATING how an original athletic tendency [p191] Sanders: FOR THE PURPOSE OF ILLUSTRATION, assume that...
---- for the purpose of dividing/divisions
Erdnase: the action is FOR THE PURPOSE OF inserting the desired cards in the DIVISIONS created. [p77] Sanders: some form of the V-tenon is employed FOR THE PURPOSE OF DIVIDING the cross-sectional area
--- for (gerund) purposes ----
Erdnase: and the shift possesses many advantages FOR CONJURING PURPOSES. [p135]
Sanders: giving added height to shieve-wheels within the shafts FOR SINKING PURPOSES
Note: "is sufficiently answered" pattern gleaned from from Carlo Morpurgo's overlapping sequences

Erdnase: THE GREATER THE emergency, or THE GREATER THE stakes, THE GREATER THE nerve required. [p23]
Sanders: THE GREATER THE diameter THE GREATER THE strength of the timber.
Erdnase: though of course THE GREATER THE number, THE MORE probability of the dealer noticing the diminished condition of the deck [p115]
Erdnase: In all card entertainments THE MORE palaver THE MORE the interest is excited [p174]
---- the larger X...the easier Y ----
Erdnase: THE LARGER, or THE LONGER the hand, THE EASIER it will be for a beginner to accomplish this shift [p101]
Sanders: THE LARGER excavations are relatively THE EASIER and cheaper to drive.
---- Parallel "so" ----
Erdnase: In most card games where there is a stake at issue the scrutiny is SO CLOSE and the rules are SO STRICT, that the expert card handler...
Sanders: there were NONE SO VILLAINOUS, NONE SO LOST to decency, NONE SO DEGENERATED and morally demoralized as our mild-mannered and genial comrade...
---- Other (non-matching) parallel comparative constructions ----
Erdnase: THE MORE at a time THE SIMPLER to run up more desired cards [p77]
Erdnase: THE MORE PLAYERS THE MERRIER [p117]
Erdnase: THE MORE the methods for blind shuffling are varied THE GREATER are the probabilities of convincing the company that the cards are genuinely mixed [p164]
Erdnase: THE LESS the company knows about the dexterity of the performer, THE BETTER it answers his purpose. [p127-128]
Erdnase: The resourceful professional FAILING to improve the method CHANGES the moment [p96]
Sanders: when the material run through IS RICH a LONGER head with a SHORTER tail is taken, where POOR a SHORTER head with a LONGER tail. [SMR]
Sanders: when he tumbles into one kaleideoscopic mass WHAT HAS BEEN SAID, without reference to WHAT
HAS OCCURRED. [mhs-vol2 intro]
Sanders: its resources as UNDEVELOPED as they were UNDOUBTED [mhs-vol2 intro]
Sanders: the benefits TO BE DERIVED FROM and the happy results OBTAINED BY a proper application of the milk of magnesia [CR bio]

Note: "the greater the" pattern was gleaned from from Carlo Morpurgo's overlapping sequences.

- See also litanies
---- rhetorical scheme: litany of opposites [in context of an educational goal] ----
In this example, both writers use the same rhetorical device to structure their expressions when describing their education.

Erdnase: After the awakening our education progressed through close application and constant study of the game, and the sum of our present knowledge is proffered in this volume, for any purpose it may answer, TO FRIEND AND FOE, TO THE WISE AND THE FOOLISH, TO THE GOOD AND THE BAD, TO ALL ALIKE, with but one reservation, that he has the price. [p14]

Sanders: And thus FOR GOOD OR ILL, FOR BETTER OR FOR WORSE, FOR AFFAIRS GREAT AND AFFAIRS SMALL, our "class of '85" was organized and launched as an integral and concrete fact in the existence of what is now Columbia University in the City of New York.
---- Other litanies ----
Erdnase: IT MAY caution the unwary...and IT MAY inspire the crafty...IT MAY demonstrate to the tyro...and IT MAY enabled the skilled [p3]
Erdnase: BUT it will not make the innocent vicious, OR transform the pastime player into a professional; OR make the fool wise, OR curtail the annual crop of suckers; BUT whatever the result may be, if it sells it will accomplish the primary motive of the author, as he needs the money. [p3]
Erdnase: THE slightest action that appears irregular, THE least effort to distract attention, OR THE first unnatural movement, will create suspicion [p11]
Erdnase: exhaustive review of the many advantages that CAN BE, HAVE BEEN, AND ARE constantly taken at the card table [p12]

Sanders: Some, and in fact the larger number of our Mining Engineers, have forsaken THE gay and humdrum, THE exhilarating and precarious, THE usually unsettled and usually hard and disagreeable but always THE fascinating existence of the honest miner and the princely smelterman... [CR bio]
Sanders: and have become TRADERS on the exchange, TRAVELERS at large, BANKERS in Wall Street, EDUCATORS and planters, AND what not... [CR bio]
Sanders: the society makes NO pretence of publishing a connected account of the series of events that have taken place relative to the history of Montana both before and since its organization as a Territory, NOR yet beyond a certain point, as to its correctness, is an attempt made to weigh and sift what has been gathered, NOR do we draw conclusions as to the relative importance of the events narrated, OR follow out in them the relation between cause and effect. [MHS-lib]
Sanders: A QUIET, agreeable and kindly chap, DIRECT in his ways, DETERMINED in his manner, EVENTEMPERED, WELL SET UP but not tall, STUDIOUS and standing high in his studies and friendships, one who HELD A VERY HIGH PLACE in the esteem of his classmates ... [CR bio]
Sanders: SOME incidents of our College days, SOME characteristics of our class mates, SOME happenings or events that then occurred, are indelibly woven into our memories of those times. [CR bio]
Sanders: To them it was a contention FOR farms, FOR herds, FOR gold, FOR office and FOR the gratification too often of mean ambitions [mhs-vol2 intro]

Erdnase: quite OPENLY, CARELESSLY and WITHOUT HASTE [p110]
Erdnase: The action is SILENT, RAPID, UNDETECTABLE if well performed [p137]
Erdnase: and as a rule is GENEROUS, CARELESS and IMPROVIDENT. [p10]
Erdnase: knowledge of the marvelous SUBTLETY, FINESSE and RESOURCES of the sex, [p174]
Erdnase: They are CUMBERSOME, UNNECESSARY, and a CONSTANT MENACE to his reputation. [p15]
Erdnase: For superior work the cards should be NEW, THIN, FLEXIBLE and OF BEST QUALITY [p25]
Erdnase: make an ordinary shuffle or "riffle" without BENDING, BREAKING, EXPOSING or in some way RUINING half the cards [p22]
Erdnase: Any departure from his customary manner of HOLDING, SHUFFLING, CUTTING or DEALING the cards may be noticed [p22]
Erdnase: the foregoing methods are MUCH EASIER to execute, MORE PERFECT as a blind, and ANSWER EVERY PURPOSE. [p39]

Sanders: But if that QUAINT, LOVABLE and KINDLY nature [CR bio]
Sanders: he is still the same GENIAL, KINDLY and COMPANIONABLE comrade and friend as of old. [CR bio] Sanders: And one of these PLEASANT, CHEERY, DELIGHTFUL fellows was Detwiller, our GOOD FRIEND, COMRADE and CLASSMATE. [CR bio]
Sanders: Always COMPANIONABLE, CHEERFUL and FRIENDLY, it was indeed a pleasure to meet "Louie" Noble. [CR bio]
Sanders: FIRST protestingly, THEN insistently, AND FINALLY angrily, he insisted upon a return of the missing article, [CR bio]
Sanders: This was probably the one time in his cheery life when the GENIAL, the COMPANIONABLE, the JOLLY and KINDLY Page quite drifted away from his temper. [CR bio
Sanders: and so KNEAD and MOLD and FASHION and INFLUENCE and INSTRUCT them
Sanders: and enjoyed many a merry LARK and JEST and PRANK.
Sanders: NONE SO villainous, NONE SO lost to decency, NONE SO degenerated [CR bio]
Sanders: he is safe by a comfortable margin in thus furnishing a CLOSE-FITTING, PLUSH-LINED, BURGLARPROOF biographical sketch.
Sanders: always pleasant AND courteous, kindly AND affectionate AND winning good fellowship.
Sanders: GOOD, HEARTY, WHOLESOME work.
Sanders: it is a SHORT, SIGHTLY, and SIMPLE name [L-1896]

- See also parallelisms
---- very great good fortune ----
Erdnase: it has been my VERY GREAT GOOD FORTUNE to discover... [p175]
Sanders: we know the VERY GREAT AND GOOD FORTUNE we had in studying under you
--- ever/never failing ----

Erdnase: our constant but EVER FAILING efforts to devise a perfect shift [p132]
Sanders: as well as the perennial youthfulness, NEVER-FAILING good nature and kindly interest in their students
Erdnase: He IS EVER prepared for the most unexpected demands upon his ability [p125]
Erdnase: one particular position for the left hand fingers IS EVER adhered to [p22]
Sanders: And his brain IS EVER teeming [CR poem]
---- and a great favorite ----
Erdnase: The first shift described is executed with both hands AND IS A GREAT FAVORITE. [p97]
Erdnase: This is A GREAT FAVORITE for terminating certain tricks [p170]
Sanders: who had been a fellow-cadet with him at West Point AND A GREAT FAVORITE there [MHS-vol2]
---- the task is completed/done ----
Erdnase: if [...] THE TASK IS COMPLETED [p183]
Erdnase: At last THE TASK IS DONE
---- the nature of ----
Erdnase: company is not yet informed of THE NATURE OF the trick [p180]
Sanders: The timbering of shafts varies according to THE NATURE OF the ground [MT]
---- trusting/kindly nature [nature as personality] ----
Erdnase: the TRUSTING NATURE of a fledgling [p14]
Sanders: But if that quaint, lovable and KINDLY NATURE enjoyed the..
---- percentage of people ----
Erdnase: but the PERCENTAGE OF PEOPLE in this feverish nation who would not enjoy winning one is very small. [p9]
Sanders: The population contained an unwonted PERCENTAGE OF highly intellectual PEOPLE [mhs-vol2 intro]

[^1]Erdnase: Faro cards, USED IN CONNECTION WITH a certain form of "brace" box, are treated in this manner. [p18]
Sanders: Waste filling is frequently USED IN CONNECTION WITH and as adjunct to the various systems of timbering... [MT]

Erdnase: and it is EMPLOYED almost exclusively IN CONNECTION WITH marked cards [p58]
Sanders: a word that is very generally EMPLOYED IN CONNECTION WITH the adjective montanus... [MHSvol7]
---- nothing more than ----

Erdnase: knowing players require NOTHING MORE THAN a bare suspicion of skill to [p24]
Sanders: a method of timbering...is NOTHING MORE THAN the crib of the flat deposits
---- a matter of opinion/taste/judgment ----
Erdnase: Now it may be A MATTER OF OPINION, but we think it would... [p126]
Erdnase: Of course the patter is all A MATTER OF TASTE [p176]
Sanders: the application of principles becomes often A MATTER OF JUDGMENT, experimentation and renewal
---- may be a matter of ----
Erdnase: Now it MAY BE A MATTER OF opinion, but we think it would... [p126]
Sanders: but the information necessary to determine such points MAY BE A MATTER OF previous knowledge
---- many another ----
Erdnase: and the reputation is liable to precede him in MANY ANOTHER. [p23]
Sanders: among files containing MANY ANOTHER mining report that is less picturesque, less unique. [ML1913]
Sanders: as sweet and handsome as MANY ANOTHER [CR bio]
---- lost to [idiomatic] ----

Erdnase: been completely LOST TO modern civilization. [p175]
Sanders: there were none so villainous, none so LOST TO decency... [CR bio]
---- possess characteristics ----
Erdnase: they, like the members of any other family, POSSESS certain individual CHARACTERISTICS or temperaments [p191]
Sanders: those rocks that POSSESS such physical CHARACTERISTICS of strength, hardness and density
---- having characteristics and temperaments/traits ----
Erdnase: they, like the members of any other family, POSSESS certain individual CHARACTERISTICS OR TEMPERAMENTS [p191]
Sanders: Along WITH other generous TRAITS AND CHARACTERISTICS, Woolson is well remembered for his whole-souled and ready loyalty to the class [CR bio]
---- connected with the operation ----
Erdnase: There is no difficult sleight-of-hand manipulation CONNECTED WITH THE OPERATION. [p82]
Sanders: totals of expense CONNECTED WITH THE development, OPERATION and repair of each or all of the mine-workings
Sanders: engineering works and the various OPERATIONS CONNECTED WITH THE extraction of materials
---- would not do | do well to | it is well to ----
Erdnase: Of course, IT WOULD NOT DO TO make up the desired cards from [p79]
Sanders: he WOULD DO WELL TO soliloquize with Burns [CR bio]
Erdnase: IT IS WELL TO insist that but one card must be moved at a time. [p188]
Sanders: IT IS WELL TO leave the tops undisturbed
Sanders: in this classification IT IS WELL TO assume as of the normal type those rocks that possess...
---- once upon a time [in context of youthful inexperience] ----

Erdnase: but we regret the truth of the confession that ONCE UPON A TIME we were, and we marveled greatly and also sorrowed, over a continuous and very protracted run of hard luck [p116]
Sanders: ONCE UPON A TIME, as all good fairy tales begin, callow, bashful and hopeful youths met together

```
---- the greater + noun ----
```

Erdnase: seen that the old-fashioned or hand shuffle gives THE GREATER POSSIBILITIES [p20]
Sanders: timber furnishes THE GREATER PART of the artificial supports..
---- to any extent ----

Erdnase: the cards himself, shuffles TO ANY EXTENT, and returns deck [p197]
Sanders: and the process is carried on TO ANY EXTENT by repetition
**** ---- so arranged ----
Erdnase: The deck SO ARRANGED makes every thirteenth card the same value [p179]
Sanders: shafts are of two kinds, one being SO ARRANGED that the ore cars

Erdnase: Of course cards SO HELD OUT to replace when cutting are arranged [p115] Sanders: and when SO HELD are blocked and wedged firmly in place
---- so closely ----
Erdnase: that may have been caused while SO CLOSELY palmed. [p150]
Sanders: name is SO CLOSELY interwoven with the organization of the Territory
---- other verbs using same "so" verb passive construction ----
erdnase: as long as the originators are SO DISPOSED.
erdnase: Four of a Kind will be found SO REMOVED. It is very simple to
erdnase: players could be SO IMPOSED UPON, but we regret the truth
Sanders: by an amount equal to the sections a/ y' SO REMOVED.
Sanders: the parts of which...are SO FITTED together at the joints as to form a...
Sanders: the parts being SO FRAMED that the set may be placed in position
Sanders: the piece is SO BEVELED that this mitered face will coincide
Sanders: the timbers are SO CUT that the splice will coincide with the length-
Sanders: should be SO AFFLICTED [CR bio]
Sanders: and in his high place he has since SO BORNE himself that he has made us proud of him [CR bio]
Sanders: overcome by diagonal spiling SO PLACED as to cover these openings,
Sanders: The "lift-Pump" at the bottom of the shaft is SO PLACED for various reasons
Sanders: making their way over to the headwaters of the Musselshell river, SO NAMED because of the shells that are to be found along its banks. [MHS-vol7]
Sanders: it must, however, be SO CONSTRUCTED to withstand the impact of... [ORE]

## **** ---- Double positives ---

To add emphasis, both authors employ double positives (redundancies). These examples are taken from their various other sections to group together here as well.

Erdnase: The thumb movement is IDENTICALLY THE SAME AS IN the true deal [p55]
Erdnase: The positions of the hands ARE IDENTICALLY THE SAME AS the first method [p85]
Erdnase: Each hand occupies IDENTICALLY THE SAME position. [p161]
Sanders: when set the machine is operated in IDENTICALLY THE SAME WAY AS IN sinking or...[SMR]
Erdnase: THE MOST PERFECT shift ever devised [p135]
Sanders: One side or face, therefore, is selected - THE MOST PERFECT and even one
Erdnase: it is QUITE EQUAL to the hand shuffle as a blind [p33]
Sanders: and the sets nearly or QUITE OF EQUAL size.
Sanders: and AT THE SAME TIME SIMULTANEOUSLY rests upon three bottom plates.

- See also transitive no and unconcern and without inconvenience
---- transitive-verb + "NO" + direct-object ----
Erdnase: it will TAKE NO PART at all in the action. [p101] (two other "take no part")
Erdnase: the writer USES NO SOPHISTRY as an excuse for its existence [p3]
Erdnase: The mode of shuffling...INCITES NO NOTICE [p161]
Sanders: author of this monograph has been able to DISCOVER NO definite or sufficient REASON [MHS-vol7]
Sanders: the framing of the sets INVOLVES NO small ITEM of outlay.
Sanders: was POSSESSED IN NO small DEGREE by victorious Rome. [MHS-vol7]
Sanders: the society MAKES NO PRETENCE of publishing a connected account of the series [MHS-lib]


## Others by Erdnase:

- the player HAS NO greater ADVANTAGE save that he knows enough not to bet.
- right third finger TAKING NO PART in the action
- The right thumb TAKES NO PART in the shift
- the student will NEED NO further INCENTIVE the moment the least progress is made.
- The left third and little fingers TAKE NO PART in the action
- but the first finger TAKES NO PART in the action.
- The mode of shuffling over and under the left hand packet is commonly employed, and INCITES NO NOTICE.
- DEVISE NO END of tricks for himself,
- to SHOW NO PARTIALITY we shall
- To conclusively prove that I TAKE NO PART in the action
- test the performers ability by MAKING NO TRANSFER
- We BETRAY NO confidences in publishing this book
- but IN NO CASE stopping until well separated again. [slightly different syntax]
[Pattern pointed out by Bill Mullins in Genii Forum]
- See also without inconvenience and double positives and unconcern
---- "THE" + adj + noun [reification of a concept by using the definite article]----
In these examples, the definite article ("the") and an adjective are used to reference a category rather than an individual. e.g. "The observant dealer" is not talking about a specific dealer but a class of dealers.

Erdnase: the principal difference between the professional gambler and THE OCCASIONAL gambler [p10] Sanders: require little support other than that furnished by THE OCCASIONAL pillar of ground

Erdnase: and mentally urge THE REQUIRED action [p196]

Erdnase: the REQUIRED number [p63]
Sanders: each scantling is bored at THE REQUIRED intervals
Sanders: it (the machine) is directed in THE REQUIRED direction and there fastened... [SMR]
Sanders: THE REQUIRED INFORMATION as to orebodies beneath the surface of a mining claim [MT]
Erdnase: THE AVERAGE card player [p21]
Erdnase: THE AVERAGE professional who is successful at his own game [p10]
Erdnase: THE AVERAGE luck [p9]
Sanders: THE AVERAGE mining engineer
---- Others (unmatched) ----
Erdnase: THE OBSERVANT DEALER is thus enabled to put in his crimp high
Erdnase: THE EXPERT PROFESSIONAL disdains their assistance.
Erdnase: to the PROFESSIONAL PLAYER
Erdnase: THE CLEVER PROFESSIONAL who values his reputation
Erdnase: THE RESOURCEFUL PROFESSIONAL failing to improve the method changes the moment
Erdnase: THE FINISHED CARD-TABLE EXPERT will experience little or...
Erdnase: THE FINISHED CARD EXPERT CONSIDERS nothing too trivial that in any way contributes
Erdnase: but THE FINISHED PERFORMER will use the right hand only as a cover
Erdnase: the FAMILY DECK
Erdnase: A CERTAIN KNOWLEDGE
Erdnase: it may caution THE UNWARY [the $+\mathrm{adj}=>$ noun]
Sanders: the fascinating existence of THE HONEST MINER and THE PRINCELY SMELTERMAN
Sanders: the fascinating existence of THE SUCCESSFUL OPERATOR
Sanders: methods of framing THE TYPICAL RECTANGULAR SHAFT SET.

- See also "the required"
---- Hendiadys ----
Hendiadys is a figure of speech where two words are connected by a conjunction (e.g. "and") to convey a single idea. The conjoined words can be adjectives, nouns, or even verbs. It is a way of pinpointing at an idea from different angles simultaneously. For example, we find this in Hamlet when he says "Oh, what a ROGUE AND PEASANT SLAVE am I" or "they are the ABSTRACT AND BRIEF chronicals of the time." Both Erdnase and Sanders use it and other forms of conjoined signifiers extensively.

Erdnase: This KNOWLEDGE, OR THOROUGH COMPREHENSION of the possibilities of professional card playing
Erdnase: To DISCRIMINATE AND SHOW CLEARLY the two phases of card manipulation
Erdnase: The CAUTIOUS AND PRUDENT EXPERT makes it a rule to never... [p115]
Erdnase: After the awakening our education progressed through CLOSE APPLICATION AND CONSTANT STUDY of the game, [p14]
Erdnase: For the benefit of the UNENLIGHTENED OR CURIOUS reader [p16]
Erdnase: the acme of INGENUITY AND MECHANICAL SKILL has been reached and most extravagant prices are demanded and paid, for these innocent-appearing little silver-plated articles. [p18]
Erdnase: there is LITTLE OR NO difficulty in finding the crimp
Erdnase: we insist that ALL OR ANY of the various methods of executing it
Erdnase: Retaining the whole deck in a prearranged order is SELDOM OR NEVER attempted [p159]
Erdnase: so that he may be enabled to NONPLUS AND SQUELCH that particularly OBNOXIOUS BUT EVER PRESENT individual
Erdnase: The simplest sleight, if well rigged up with either PLAUSIBLE OR NONSENSICAL clap-trap, may be made to provide a most ASTONISHING AND ELABORATE card trick
Erdnase: I am constantly importuned by some of the MOST CURIOUS AND LEAST DISCERNING of my auditors
Erdnase: The GENERAL MOVEMENT OR SWING of the hands is not stopped [p148]
Erdnase: the right hand being released and PUSHING OR PATTING the cards into position. [p162-163]
Erdnase: and hold so that the outer ends of the cards may be SPRUNG OR "RUFFLED," with the faces towards the spectator. [p166]
Erdnase: The artist is always sure of a comprehensive and appreciative audience. [p125]
Erdnase: he may be enabled to NONPLUS AND SQUELCH that PARTICULARLY obnoxious BUT EVER
PRESENT individual [p127]
Sanders: and over all the STRANGE AND FUNNY happenings because of them,
Sanders: while the problems we then PONDERED AND WORKED over look out at us from the blackboards BE-
DIMMED AND POWDERED with the DUST AND ERASURES of the years
Sanders: the HUMANITIES AND AMENITIES of our present civilization.
Sanders: the proper SEGREGATION AND DIFFERENTIATION of mine-accounts
Sanders: samples taken from MANY AND VARIOUS places
Sanders: For cases in which MANY AND EXTENSIVE developments are involved
Sanders: which includes ALL AND EACH of our own sweet and precious selves
Sanders: his WHOLE-SOULED AND READY loyalty
Sanders: followed with great INTEREST AND PRIDE (crbio)
Sanders: the contest was SUDDENLY AND UNCEREMONIOUSLY prohibited
Sanders: yet was his HEART AND BEING fanned by gentle fires, and UNEXPECTED MIRTH AND HUMOR
would FLASH AND BEAM in him
Sanders: which give to this desire THE AUTHORITY AND DIGNITY OF a command
Sanders: on a VENERABLE AND LONELY elm of our attenuated campus
Sanders: the larger excavations are relatively the EASIER AND CHEAPER to drive.
Sanders: that served at once as FOIL AND CLOAK for many of us who were the ROISTERERS AND
SWASHBUCKLERS of the Class.
Sanders: Of his many GOOD AND FRIENDLY qualities we might write largely,
Sanders: with very GREAT INTEREST AND PRIDE his SUCCESS AND GOOD FORTUNE as an Architect of more than local reputation.
Sanders: Woolson is well remembered for his WHOLE-SOULED AND READY loyalty to the class

Sanders: the VICTIM AND PRINCIPAL ACTOR in the comedy
Sanders: these VAGRANT AND VAGABOND Mining Engineers
Sanders: the REFINED AND FINISHED product
Sanders: the VICTIM AND PRINCIPAL ACTOR in the comedy has found fame and worthily won his way to PROUD AND LOFTY eminence in the TECHNICAL AND BUSINESS world of the steel trade,

Related to the above, both authors frequently use a specific form of conjoined phrase with "time and [abstract noun]"
Erdnase: much TIME AND LABOR are saved by this plan [p24]
Erdnase: has expended much TIME AND CARE in illustrating [p25]
Erdnase: following definitions will save much TIME AND PERPLEXITY [p25]
Erdnase: a uniformity of TIME AND ACTION must be maintained [p32]
Erdnase: Rapidity is not nearly so important as regularity of TIME AND MOVEMENT. [p82]
Erdnase: The action should be performed in about the same TIME AND MANNER that would ordinarily be taken [149]
Erdnase: effect is not at all commensurate with the TIME AND LABOR spent in acquiring the skill [p171]
Sanders: made urgent demands upon his TIME AND ATTENTION
Sanders: and TIME AND CHANGE are placing beyond our reach much...
Sanders: even to touch upon his mighty works would overcrowd our TIME AND SPACE
Sanders: and so arranged TIME AND PLACE that he was taken up by the tides of fortune and lifted up...

## Connective phrases

All writers use connective phrases as "glue" to introduce, qualify, or combine thoughts. The following sampling illustrates the common palette of such phrases that Erdnase and Sanders use to give structure and flow to their sentences.
---- in nowise ----
The relatively uncommon word "nowise" is used in the context of some explanation/description.
Erdnase: REVELATIONS are calmly dismissed with the ASSERTION that this or that artifice is employed; IN NOWISE attempting to EXPLAIN the process or give the detail of the action... [p14] Sanders: are too insignificant for MENTION in this connection, while in other points the
DESCRIPTION of the surrounding region IN NO WISE tallies therewith. [MHS-vol7]
Sanders: IN THIS WISE did Sanders meet Hollis at Joplin [CR bio]
Sanders: IN THIS WISE the human tide that had flowed too strongly towards the west
---- in either event ----

Erdnase: IN EITHER EVENT the answer to the first question discloses the identity of the thought card. [p195]
Erdnase: IN EITHER EVENT he has only thirteen cards to run through before finding one of the same value [p181]
Sanders: IN EITHER EVENT it is necessary to clear it out before it can be charged. [SMR]
---- it is needless to say that ----
Erdnase: "IT IS NEEDLESS TO SAY THAT I do not know which cards were selected," (in patter) [p201]
Sanders: IT IS NEEDLESS TO SAY THAT exactness in the fitting together of the joints cannot be expected unless all necessary precision has been employed in their framing.
---- but/except so far as | so as to ----
Erdnase: BUT SO FAR AS we can learn from the exhibitions and literature of conjurers [p126]
Sanders: EXCEPT SO FAR AS such unused space is advantageous [L1-1906]
Erdnase: SO AS TO preclude the possibility of the schemer being discovered [p116]
Sanders: the drill is driven slowly SO AS TO decrease this vibration [SMR]
---- but/though by no means... ----

Erdnase: That this is generally true cannot be denied, BUT it is BY NO MEANS always so. [p109]
Sanders: And finally, the last THOUGH BY NO MEANS the least interesting in point of its application,
---- In this way X can... ---
Erdnase: IN THIS WAY he CAN get the under cards by bottom dealing. [p110]
Sanders: IN THIS WAY the jog CAN be avoided [L1-1906]
---- it would seem ----
Erdnase: IT WOULD SEEM very awkward indeed [p56]
Sanders: which IT WOULD SEEM is likely to come into general use
Sanders: so as to allow more spring but THIS IT WOULD SEEM must weaken the timbers. [SMR]
---- it/that will suggest ----
Erdnase: IT WILL SUGGEST retirement at once rather than playing against the handicap of... [p24]
Erdnase: The design of the particular deck WILL SUGGEST whether a dot, line, or blockout, would be
least noticeable. [p17]
Sanders: THAT WOULD SUGGEST a familiarity so assured...
---- it may be (noticed|noted) that ----

Erdnase: IT MAY BE NOTICED THAT only part of the deck is actually shuffled [p31]
Sanders: IT MAY BE NOTED THAT the drift of level No. 1 bends towards the north [ref scheme]
--- but/and...in any case ----
Erdnase: BUT IN ANY CASE it would not matter much [p95]
Sanders: AND it is well IN ANY CASE to leave them in place for several sets from the bottom of the shaft [MT]
---- in such/which case ----

Erdnase: IN SUCH CASE the cards are not crimped. [p124]
Erdnase: IN SUCH CASE the performer will at once state [p190]
Sanders: IN SUCH CASES the remedy is usually applied
Sanders: often IN SUCH CASES from what will be its top
Erdnase: IN WHICH CASE the assistance of the deck for the third exchange is not required [p178] Sanders: IN WHICH CASE the sets are framed with a hitch..
---- in other words ----

Erdnase: IN OTHER WORDS, to run one and throw balance on top [p81]
Sanders: IN OTHER WORDS the texture of the materials of construction, becomes possessed of sufficient strength
---- the object of [as in "the purpose of"] ----

Erdnase: THE OBJECT OF a shift is well known, and especially... [p96]
Erdnase: THE OBJECTS OF blind shuffling are to retain a top stock... [p29]
Sanders: THE OBJECT OF this table is to concentrate low grade material to such a degree that it will pay to smelt and handle it. [SMR]
--- is subject to ----

Erdnase: as the deck IS never SUBJECT TO being handled or counted [p111]
Sanders: timber supports ARE SUBJECT TO rapid decay
---- on the subject ----
Erdnase: While ON THE SUBJECT OF cuts, [p48]
Sanders: a complete treatise ON THE SUBJECT, [MT editor]
Erdnase: our treatment OF THE SUBJECT [p97]
Sanders: its bearing UPON THIS SUBJECT the following letter...
Sanders: whose opinions ON THIS SUBJECT are entitled to the utmost attention [MHS-vol7]
---- save that ----

Erdnase: the player has no greater advantage SAVE THAT he knows enough not to bet. [p120]
Sanders: in all respects SAVE THAT of immediate delivery of the chute, the most satisfactory
---- by the fact that | and in fact ----
Erdnase: seen BY THE FACT THAT it is seldom or never
Sanders: it is counterbalanced, however, BY THE FACT THAT when...
---- and in fact
Erdnase: AND IN FACT if the packets can be held under perfect control [p163]
Sanders: Some, AND IN FACT the larger number of our Mining Engineers, have forsaken... [CR bio]
---- and at the same time ----

Erdnase: AND AT THE SAME TIME sliding pack outwards and to the right [p139]
Sanders: AND AT THE SAME TIME to furnish an opening between the plates and the foot of the shield [MT]
---- for that purpose | for these reasons | for this reason ----
Erdnase: and many have been written exclusively FOR THAT PURPOSE,
Erdnase: the right first finger is curled up on top FOR THAT PURPOSE
Sanders: making an appropriation FOR THAT PURPOSE and chiefly pertaining to life in the
Erdnase: AND FOR THESE REASONS we believe it worthy of unstinted effort to master thoroughly. [p122]
Sanders: FOR THESE AND OTHER REASONS it proved to be entirely impossible to...
Erdnase: FOR THIS REASON we suggest the early acquirement of the mentioned shift. [p127]

Sanders: and FOR THIS REASON our people should... [montLib]
Sanders: and FOR THIS REASON are in frequent use in underground operations of magnitude
---- is as follows ----

Erdnase: The best for all purposes IS AS FOLLOWS: [p104]
Sanders: additional information from Mr Clevenger IS AS FOLLOWS:
---- Fronted connective clauses: "Should/Where/That the ...." ----
In this syntactic construction, sentences are fronted with a connective clause that either takes another clause as an argument or functions as a noun phrase.

Erdnase: SHOULD the player select the ace he wins the money. [p117]
Sanders: SHOULD the shaft have been carried below the point for a station, the obstructing wall plates at the entrance must be removed

Erdnase: WHERE the civil authorities countenance these institutions they are generally conducted by men of well known standing in the community [p11]
Sanders: WHERE a sill piece is desirable the sill is framed in the same manner as the cap
Erdnase: THAT this is generally true cannot be denied [p109]
Sanders: THAT the statement is not equally specific with regard to the... may possibly be explained by the fact that...
---- "but" meaning "only" ----
Erdnase and Sanders use this construction repeatedly. It sounds distinctive, but that's probably mostly because it isn't used often these days. For example, Google N-Gram viewer shows a steady drop in "but little" from the mid 1800s. So we probably shouldn't conclude much from this pattern being used by both authors.

Erdnase: WITH BUT ONE RESERVATION, that he has the price
Sanders: WITH BUT FEW EXCEPTIONS [MHS-lib]
Erdnase: there is BUT ONE pleasure in life greater [p9]
Erdnase: there are BUT TWO OR THREE players in a game [p111]
Erdnase: the deck is held BUT A FEW INCHES from the table [p47]
Sanders: ARE BUT FEW that rest upon our shelves. [MHS-lib]
Sanders: there now remain in the possession of the society BUT 50 copies [MHS-lib]
Erdnase: THERE BEING BUT THIRTEEN names to commit, [p179]
Sanders: THERE BEING TWO men at each of the five drills... [SMR]
Sanders: Circular shafts are BUT LITTLE employed in America [L1-1906]
Sanders: they blasted BUT LITTLE stronger than if for solid rock [SMR]
Sanders: the years appear to have changed him BUT LITTLE [CR bio]
Erdnase: we will describe BUT THREE which we consider at all practicable [p95]
Sanders: The stull IS BUT THE adaptation of the prop
Sanders: which IS BUT THE application of the post [MT]
---- but for/in ----
Erdnase: I have impressed you somewhat with the intelligence and agility the Jacks possess in themselves, BUT FOR fear you may fancy that I have anything to do with their performance [p192]
Erdnase: and the palmed cards remain in the dealer's possession BUT FOR the moment. [p111]
Sanders: the facts here narrated were related to me by my father, BUT FOR the reason that the notes thereon have
been misplaced and cannot be found I am compelled... [MHS-vol7]
Sanders:will soon be known BUT IN the more fortunate museums
[This general pattern was first pointed out by Bill Mullins in Genii Forum.]
---- some QUANTITY + noun ----
This is another old-fashioned construction that is perhaps less distinctive than it at first appears. For example, Google N-Gram viewer shows a steady drop in "some little" from the mid 1800s.

Erdnase: SOME LITTLE PRACTICE must be put in to acquire the knack [p159]
Erdnase: It is necessary to put SOME LITTLE BRAINS into so simple [p80]
Erdnase: show SOME SLIGHT embarrassment [p202]
Sanders: after SOME FOUR YEARS this opened up to the... [CRbio body]
Sanders: on an average SOME FOUR DRILLS are sharpened [SMR]

## 9) Miscellaneous word choice

## Prev Next Table of Contents

This section includes unusual or idiosyncratic word choices (e.g. dalliance, longitudinal, etc) used by both authors. And in some cases, we include examples when less common or secondary word sense is used (e.g. when neighbor is used
figuratively or crowding is used as an adjective). Both writers exhibit a willingness to convert words on the fly into other parts of speech (for example using the adjective convex or the noun cone as a verb).

Note that not all unusual words are listed below - those with strong thematic, topical, or biographical significance are highlighted in other sections. For example, the word faro is referenced in the section for Biographical Allusions. And the words cumbersome, culminate, curriculum, contrivance, post-graduate, and vocation are found in the section on the theme of Excellence.

## **** ---- dalliance ----

Erdnase: If DALLIANCE with the deck is allowed [p60]
Erdnase: when the company will stand for DALLIANCE at all [p62]
Sanders: to tread the primrose paths of DALLIANCE and joyance. [CR bio]
Dalliance is an uncommon word used by both writers. Dalliance is defined as: "Frivolous spending of time; dawdling: passed the summer in idle dalliance."

It also has some possible biographical connotations with Sanders. We know that Sanders enjoyed spending time in his home in Helena "reading," "writing," and "loafing." He poetically titled the first section in his summer mining school memoir as "Sinking and Drifting with Machines." And in one of his college reunion poems he writes "I'd rather lie upon my back and gaze up to the sky." These all evoke the feeling of passing the summer on the primrose paths of idle dalliance. It is also worth noting that the phrase "primrose path of dalliance" appears in Hamlet. A list of Sanders' other literary allusions are listed here.

Erdnase also alludes to a similar relaxed state of mind with "This ability once acquired gives the expert EASE AND ASSURANCE in any kind of company, and enables him to LULL into a STATE OF ABSOLUTE SERENITY the minds of many players who may be naturally suspicious."
****---- distinctive/unusual UN-words ----

Erdnase: with the sublimest UNCONCERN [p10]
Sanders: with UNWHISPERED request that tears and other paraphernalia be reserved for future occasion.
[from Leonard Hevia]

- See also transitive no and double positives and without inconvenience
**** ---- converting words into a different part of speech than they're normally used ----

Sanders and Erdnase both exhibit a tendency to transform words from their common form into a non-standard and different part of speech. This results in quite unusual adverbs (slantingly) or verbs (to convex). It is yet another example of their facility with language and ability to creatively bend it to their purpose.

In this example, an adjective or noun is used as a causative or inchoative verb, representing the object taking on a geometric shape:

Erdnase: Then, with a sliding downward movement of the left thumb crimp or CONVEX the cards sufficiently to read the index on each [p105]
Erdnase: the crimp is put in by first CONCAVING the whole deck. [p51]
Sanders: the material will CONE UP on the floor of the bin
In this example, a common noun or verb is converted into an unusual adverb:
Erdnase: The deck is held SLANTINGLY [p97]
Sanders: First PROTESTINGLY, then insistently, and finally angrily, he insisted upon a return of the missing article

In this example, the word crowding is used in an adjectival form.
Erdnase: who have been least CROWDING and therefore more deserving [p173]
Sanders: and have followed with admiration and pride their CROWDING labors through nearly half a century

The following example is less unusual than those above, but shows the same tendency. The word chance is used by both authors as a verb, rather than as a noun.

Erdnase: Now if the suit CHANCES to be the suit of the card called for [p183]
Erdnase: may be run up by the last method if the cards CHANCE to be separated [p65]
Erdnase: As mentioned, the desired Three must CHANCE to be separated [p65]
Sanders: It CHANCED that the language of Spain became more thoroughly Latinized [MHS-vol7]
Sanders: did the historian CHANCE to meet him at an out-of-the-way camp called Chicago [CR bio]
The following are other examples of Erdnase and Sanders using a novel term, transforming or using a word in a less common part of speech, or applying a modifier to an atypical object. Sanders sometimes does this for comedic effect.

Erdnase: working his apparatus perfectly and SECRETING [doing secretly] the extra cards while in his hands [p15]
Erdnase: Our readers ESSAYING the tricks should compose their own monologue [p172]
Erdnase: he must never admit his skill or grow CHESTY over his ability [p23]
Erdnase: Cheap cards are CLUMSY and not highly finished. [p25] ["Clumsy" is typically applied to actions or people, not objects.]
Sanders: he is still the same genial, kindly and COMPANIONABLE comrade and friend as of old. [CR bio]
Sanders: The wooden rungs are often simply SPIKED to the scantlings [MT]
Sanders: He's full CYCLOPAEDICULOUS, full of reliance; [CR poem]
Sanders: no formula of mathematics outside of the fourth dimension could establish its SINUOSITIES

Sanders: We are proud of you, dear Titus, / Proud of you as THUNDERATION [CR Poem]
Sanders: discontent was engendered and much feeling EVIDENCED privately and in [MHS-vol7]
In this example, we find sequences of novel hyphenated adjectives, sometimes formed from verb participles:
Erdnase: extravagant prices are demanded and paid, for these INNOCENT-APPEARING little SILVER-
PLATED articles. [p18]
Sanders: the historian assumes that he is safe by a comfortable margin in thus furnishing a CLOSE-
FITTING, PLUSH-LINED, BURGLAR-PROOF biographical sketch. [CR bio]
Sanders: one of our patent NON-COLLAPSIBLE DOUBLE-RIVETED reinforced obituaries [CR bio]
Other uses of hyphenated terms
Erdnase: card-handling vice-like, hold-out, non-dealer, the turn-up, hocus-pocus, hap-hazard, card-handler, card-table drawing-room, card-handling, Palm-Shift, blind-shuffling, up-and-down, up-coming, curled-up, every-day, clap-trap, Beau-monde, over-confident, pen-knife, mind-reading, fifty-two-card deck, to-night, by-play, leap-frog, diamond-shaped, mealy-mouthed, post-graduate, so-called, simon-pure, Self-styled exprofessionals, moss-covered, self-satisfied, awl-like, pre-arranged, old-fashioned, past-master, bare-faced

Sanders: well-merited, heart-satisfying, heart-breaking, heart-failure, winding-shrouds, lightning-like, "four-in-hand ties", tuber-meshanic, rubber-neck, pir-hoo-ett, power-plant, over-ripe, water-front, high-balls, eightoared race, gold-mines, never-failing, upper-lip, "long-hair", tide-swept, ear-drums, fire-cracking, quickwitted, trolley-car, wander-lust, ear-trumpet, care-free, hoss-sense, tear-dimmed, hair-triggers, circuit-riding mining engineer, affectionately-given handle, kow-tow, out-of-the-way, ill-starred, mussed-up, whole-souled, ill-luck, cross-questioning, self-constituted
**** ---- coups ----

Erdnase: Two or three COUPS in the course of an evening will not flush the quarry [p19]
Sanders: In fact, we're in a precious mess through all their COUPS des main [CR poem]
**** ---- divining ----
Erdnase: the mysterious power of DIVINING the presence of water or metals that lay hidden far under the ground [p175]
Sanders: And since I am now DIVININ' / That, friend Clark, you're not moonshinin' [CR poem]
**** ---- longitudinal/crosswise/lengthwise/coincident/uppermost/parallel [positional terms] ----

Erdnase: The LONGITUDINAL Shift [p130]
Sanders: and their designations marked within the main LONGITUDINAL workings
Sanders: distance pieces, where necessary, retain the sets in their proper relative positions, LONGITUDINALLY;
Erdnase: but as the deck is held CROSSWISE it is much more rapid. [p135]
Erdnase: Hold the deck in the left hand, CROSSWISE, in the customary manner... [p159]
Sanders: those CROSSWISE lines which locate and outline the shapes of the joints
Erdnase: PLACE it on handkerchief LENGTHWISE over right hand [p99]
Sanders: while posts when used are PLACED LENGTHWISE of the shaft as distance pieces to separate the sets
Erdnase: When the blind shuffles with the COINCIDENT jog and break [p126]
Erdnase: a movement appearing as COINCIDENT card table routine [p96]
Sanders: within the bin, approximately COINCIDENT with or at a slightly steeper inclination
Erdnase: the Ten being UPPERMOST
Erdnase: spectator to hold it in the hand that happens to be UPPERMOST.
Sanders: the one that will be the top or UPPERMOST side of the timber..
In this example, an object is described as passing parallel to another involving a geometric plane.
Erdnase: the deck must continue on the same PLANE until quite free of each other... letting the right thumb with the corner of deck PASS under it, so that the card can lie PARALLEL with, but still above, the left palm.
Sanders: Those PLANES, which are PASSED PARALLEL to the vertical transverse and vertical longitudinal
--- stand + adj (used figuratively as linking verb) ----
Erdnase: Hence this work STANDS UNIQUE in the list of card books. [p13]
Sanders: Therefore it is that they STAND SURPRISED at the grateful...
Sanders: Where now you STAND EXALTED
--- using the word "summer" to modify a noun while making an analogy ----
Erdnase: AS a Saratoga trunk to A SUMMER GIRL. [p185]
Sanders: AS clouds through SUMMER HAZE [CR Poem]
---- terrific [used in ironic manner] ----
Erdnase: If TERRIFIC denunciation of erstwhile associates, and a diatribe on the awful consequences of gambling are a criterion of ability [p13]
Sanders: Now, think with what TERRIFIC aches the brain would have to do / That for its line invention takes to work out ideas new. [CR poem]

Erdnase: It is also the principal aid in the BLIND riffles and cuts. [p27]
Sanders: except in the case of prospecting hidden or BLIND deposits
Erdnase: this probability when his right-hand NEIGHBOR is not an ally. [p24] Sanders: is to pound on the NEIGHBORING rock where it wears to no advantage. [SMR]

Erdnase: a clever dealer can give the house a percentage that would IMPOVERISH A PRINCE. [p18]
Sanders: We were fed FIT FOR PRINCES (?) stuffed with veal without the veal [DIARIES]
Sanders: the fascinating existence of the honest miner and the PRINCELY smelterman [CR bio]
Erdnase: and some one says, "CARRY THE CUT," he will, of course, do so [p110]
Sanders: and at this time Mr Ashley was able to CARRY THE NAME through [L-1896]
---- word cluster: marked/figures/color ----
Erdnase: Each card is MARKED at both ends, so as to be read in any position. The peculiarity of the FIGURES or design across the end is first closely considered, and twelve fairly distinct points, or dots or dashes, are noted and located. Then the four Aces are laid out, and with a fine pen the first point located is shortened barely enough to notice. The point is white and the background RED OR BLUE, the COLOR of the ink used. [p16]
Sanders: however MARKED and COLORED may be the FIGURES shaped in the weaving. [CR bio]
Other miscellaneous word choices

## ---- misty ----

Erdnase: require nothing more than a bare suspicion of skill to immediately seek a less MISTY
atmosphere. [p24]
Sanders: As o'er fair stretches MISTY curtains drift [CR poem]
Sanders: Save MISTY years, save through some vagrant rift [CR poem]
---- lofty ----
Erdnase: call upon all four Jacks to execute their ground and LOFTY tumbling [p192]
Sanders: found fame and worthily won his way to proud and LOFTY eminence [CR bio]
Sanders: In imagination let us ascend to some LOFTY height from which we may view... [MHS-vol7]
---- intimate [verb, meaning "hint at"] ----
Erdnase: But, as INTIMATED, to retain the top stock in the riffle is the exception. [p36]
Sanders: he INTIMATES his connection with certain enterprises following vigorous terms
---- more liable ----
Erdnase: this operation is MORE LIABLE of detection [p103]
Sanders: as the piece is MORE LIABLE to bend or buckle under the weight
---- feverish [used figuratively] ----
Erdnase: but the percentage of people in this FEVERISH nation who would not enjoy winning one is
very small [p9]
Sanders: And he'd bless you, my lad, while he FEV'RISHLY wrote [CR poem]
---- congenial/genial ----
Erdnase: easily elude their persecutors, and form a more CONGENIAL coterie [p174]
Sanders: This was probably the one time in his cheery life when the GENIAL, the companionable, the jolly and kindly Page quite drifted away from his temper. [CR bio]
---- manifest ----

Erdnase: an original athletic tendency that was early MANIFESTED by them [p191]
Sanders: The latter averment is MANIFESTLY wrong to our present knowledge [MHS-vol7]
---- countenance [Note: different senses for verb/noun] ----
Erdnase: Where the civil authorities COUNTENANCE these institutions [p11]]
Sanders: ever at the front to give the light of his COUNTENANCE [CR bio]
Sanders: our friend Page was removing from his COUNTENANCE a week's ragged growth of whiskers [CR bio]
---- save [idiomatic -- meaning "except for"] ----
Erdnase: cannot be employed for arranging the cards, SAVE to a very limited extent
Sanders: into compartments, SAVE only at points where the wall plates are spliced
---- take up + (field of study) ----

Erdnase: suggest that he first TAKE UP the STUDY AND PRACTICE of our [p125]
Erdnase: are thoroughly understood, the student should TAKE UP our "SYSTEM OF PALMING,"
[p126]
Sanders: when you TAKE UP ENGINEERIN' [crpoem]
--- endeavor [as both verb and noun] ----
Erdnase: I shall ENDEAVOR to illustrate, with the aid of this ordinary deck of cards [p172]
Sanders: and so ENDEAVOR to realize how far his present contour has departed... [CR bio]
Erdnase: the main ENDEAVOR is to make it as open and free from concealment as possible [p137] Sanders: and the wander-lust of strenuous professional ENDEAVOR [CR bio]
---- summing up ----
Erdnase: an adversary enjoying ordinary luck, will find IN SUMMING UP his points [p116]
Sanders: the advantages of this construction...MAY BE SUMMED UP as follows [L2-1906]
---- interwoven ----
Erdnase: so that the left hand holds several cards that are not INTERWOVEN at the bottom [p162]
Sanders: so closely INTERWOVEN as to make their undergraduate lives warp and woof of the same fabric

Sanders: however marked and colored may be the figures shaped in the WEAVING. [CR bio]
---- induce ----

Erdnase: the mere suspicion of skill should at once INDUCE symptoms of cold feet [p12]
Sanders: could the few be INDUCED to place in permanent form the experiences of their pioneer life
---- proprietors ----
Erdnase: we do not refer TO THE PROPRIETORS or managers of gaming houses. [p11]
Sanders: both TO THE PROPRIETORS and to the staffs thereof [MHS-lib]
---- enterprise ----
Erdnase: and their profits are much the same as any BUSINESS ENTERPRISE [p11]
Sanders: have more frequently to do with ENGINEERING ENTERPRISES. [MTE]
---- indifferent(ly) ----
Erdnase: but two INDIFFERENT cards are added. [p65]
Sanders: An embankment, per se, is constructed of INDIFFERENTLY sized materials heaped together
to form a bank or mound
---- (little|greater) moment [as "importance"] ----
Erdnase: to many details that may at first appear of LITTLE MOMENT [p52]
Sanders: the texture of the particles themselves are equal to or of GREATER MOMENT than is the force of gravity
---- assume [as "adopt"] ----

Erdnase: The positions the hands ASSUME are taken quite naturally in squaring up the cards [p85]
Sanders: an adjective may ASSUME the attributes of a noun
Sanders: upon ASSUMING the duties of this office on November 6th, 1895, the Librarian was
confronted by... [MHS-lib]
---- decided(ly) ----
Erdnase: The first method is DECIDEDLY the BETTER, as it gives
Sanders: and here there would be a DECIDED WASTE of force shown by the crushing of the rock [SMR]
--- discriminate ----

Erdnase: To DISCRIMINATE and show clearly the two phases of card manipulation [p12]
Erdnase: shows a disposition to be over DISCRIMINATING he should be passed [p143]
Sanders: he cannot DISCRIMINATE between the heated exaggerations of... [mhs-vol2 intro]
---- fitting(ly) [i.e. as appropriate/commensurate] ----
Erdnase: palm, which is MOST FITTING for a discard, and especially the [p107]
Erdnase: and we may FITTINGLY select the four Queens as representing [p172]
Sanders: gives FITTING evidence of the hard work that he has accomplished... [CR bio]
Sanders: make such donations to its collections as they SEE FIT [MHS-lib]

## a) Scare quotes

Scare quotes are quotation marks a writer places around a word or phrase to signal that they are using it in a non-standard, ironic, or otherwise special sense [Wikipedia]. Both writers use them extensively.

## Erdnase

- to "make good"
- A colored attendant of a "club-room,"
- "pretty money"
- "squeals"
- so-called "victims"
- "rake-off" "look-out" "ex-professionals"
- makes "the sneak" by
- in "club-room articles"
- can be "doctored"
- of the two "blockouts"
- certain form of "brace" box
- a "crooked" box
- the "cold deck"
- "blind" shuffle
- resort to "crossfiring"
- the art of "advantage playing"
- use the "riffle"
- or make a "shift" afterwards
- for "stocking" and "culling"
- these gentlemen have to "be shown"
- however with "readers" "strippers"
- the whole "skinned"
- the use of "patter"
- the player "to skin"
- "go south"
- "with the goods on him"
- a "short" deck
- protracted run of "hard luck"
- deal or "throw" is
- locate the ace "just for fun" every time
- missed the "cinch"
- turned by a "capper"
- make the "corner" throw
- "gift of the gab"
- a "transformation"
- "big on the bills"
- method of "forcing"
- the "palm"
- "but that is another story"
- another "homemade"
- may be sprung or "ruffled"
- "shop worn" articles

Sanders:

- "made good"
- "shell game"
- our "dear delightful days"
- "four-in-hand" ties
- the "cane rushes"
- "killing off" the "freshies"
- real "dead ones" [CR mixed section]
- the purpose of "winning" or obtaining [MTE]
- and how our manly "buzzums" swell with pride [CR bio]
- "smile that won't come off" [CRbio body]
- nor yet a "long-hair" [CRbio body]
- a case of "big jaw"
- the "hatch" [CRbio body]
- "story of a life"
- no wise "skeered" "de gents" [CR bio]
- so proudly "sported" [CRbio body]
- "upon the carpet" [ML1913]
- one that will "stick" [ML1913]
- "a brave man struggling in the storms of fate" [CR bio]
- "untrodden ways" [MHS-lib]
- "blazed the trails" [MHS-lib]
- the historian would be inclined to "lave his work the bye," to side-stem the task and retrousse "down the center and do-si-do" in fear at.. [CR bio]
- "busy life, its fluctuations and its vast concerns" [MHS-vol2 intro]


## b) Parenthetical punctuation

Both Sanders and Erdnase use parentheses around individual letters/characters, to interject doubt or ironic intent.
Erdnase: careless (?) dealer
Erdnase: when his error (?)
Erdnase: cant of reformed (?) gamblers

Sanders: innate and in(co)herent modesty
Sanders: We were fed fit for princes (?) stuffed with veal without the veal [DIARIES]
Sanders: I am becoming quite a professional (?) cuisiner [DIARIES]
Sanders: It was sandy through the diggins and very hard pulling so the old plug (?) baulked and had... [DIARIES]

## c) Speech patterns/accents

Both Sanders and Erdnase mimic dialectical speech, accents, and various colloquialisms.
Erdnase: A colored attendant of a club-room, overhearing a discussion about running up two hands at poker, ventured the following interpolation: Don't trouble 'bout no two han's, Boss. Get yo' own han'. De suckah, he'll get a han' all right, suah!

## Sanders

- and dormitzer as coxswain, with his lurid "langwidge" free
- how in the name of "Heavings" did columbia...pasht th' nowlidge av the saints.
- (stockholders lafin' fit ter kill when you got down ter biz);
- We see you slayin' Mexic's sons with seven-foot machetes...[more, in Dwight bio]
- an event occurred that was so "amoosin'" that it has stuck in the minds...
- he is not married but 'as 'opes
- and faseeshusly smileth his smisle...for to sin till late once in a whisle
- if half they say is true, B'GOSH, THE GAME IS UP, B'JINKS!
- the while the BLOOMIN' octopi..
- all this BLOOMIN' coil
- of one, the fiercest of them all, YELEPT YE standard oil
- the Divvil's own crew
- lith'rachure -- in but one minnit...that contains a sthick to lick wid;
"Expect a poem," now ye do! Consarn yer blawsted nerve
(The only fun about it is that you too have to serve).
Here, I must give the wheels a turn, unwind the bloomin' coil,
Knock off a yard or two of rhyme and burn the midnight oil;
And mewed up here, like mewing Tom, while midnight hours enthuse,
Amuse the using miners with the music of my muse,
With dithyrambic runctions and blanked pentameter verse,
Rambunctious hexameter frills, each than the other worse,
In memory of other days, in rhyme that's bold and free
I'll offer here the best I have to mon cherez frères d'amie;
I'll give a poem, sure I will, to curl your fringe of hair
And make you wish you ne'er had sent that tellygraft, I swear!
It sufficeth to say that only the innate and in(co)herent modesty of the objective subject of this "story of a life" prevents the Class Historian (officially when writing of Billy Sanders) from dealing in higher superlatives than these hereinafter detailed, specified and contained, to wit: lie air young an' beautifullest an' fair; he hez carroty face an' a freckled hair; he seems pure an' nobil ez he kin be but, nixkumarouse, Bill, yer kaint fule me! He hez wondrous grace in hiz nether pegs, when he pir-hoo-etts on hiz rear hind legs: an' he thinks he's sum with hiz hullaballoo; but he kaint fule me know him throo an' throo! He hez tears in hiz eyes when he talks uv him; what he sez uv him, sure it ain't so slim; but I sez ter him, with hiz reinekaboo, naow yer kaint fule me so yer jess gaow tew! An' ter h'ar him talk uv ther pace he's set; an' uv what he's done, fer he's braggin' yet; what a bad man he, an' so Woolly! Gee! but I know yer, Bill, an' yer kaint fule me!
---- Sanders was very sensitive to speech patterns and word sounds and even discusses them explicitly. ----
Sanders: his style of RAPID-FIRE DICTION in the lecture room was effective; for once he had started upon a sentence, no convulsion of nature, fall of constellations or wreck of worlds could daunt or stop him until his say was said; and sometimes in phrase so warped and convoluted that no formula of mathematics outside of the fourth dimension could establish its sinuosities. [CR bio]
Sanders: It is a sightly and simple name, to the PRONUNCIATION of which the comparatively numerous VOWELS that go to make up the word bring forth a liquid richness, a MUSICAL RHYTHM and a RESONANT FLOW OF SOUND that is delightful. [MHS-vol7]


## d) Alliteration

This section lists instances where Sanders and Erdnase use alliteration.
Erdnase: CONGENIAL COTERIE
Erdnase: FRIEND or FOE
Erdnase: PASSION for PLAY
Erdnase: MEALY-MOUTHED PRETENSIONS of PIETY
Erdnase: PURIFIED PRODIGALS
Erdnase: PRESUMPTUOUS PLEBEIANS [p188]
Erdnase: PROMINENT among these superior accomplishments was the mysterious POWER of divining the PRESENCE
Erdnase: their former WILES and WICKEDNESS
Erdnase: GROWN GRAY at the GAME [p21]
Sanders: of all the BOLD, BAD men and TOUGHEST of TOUGH characters [CR bio]
Sanders: with BUMPERS BRIMMING over [CR poem]
Sanders: COMPANIONABLE COMRADE [CR bio]
Sanders: CONVERTERS CONVERT [CR poem]
Sanders: recount your DARING DEEDS [CR poem]
Sanders: DARED the FOE DEFY; Aye! FACE to FACE with DEATH [on D and F] [MHS-vol7 poem.]
Sanders: on the DISH WE WOULD DINE [CR poem]
Sanders: DOLEFULLY DECREPIT [CR bio]
Sanders: FESTIVE and FROLICSOME [CR peom]
Sanders: FOUND FAME and WORTHILY WON his WAY [CR bio]
Sanders: FIERCE and FELL [MHS-vol7 poem]

Sanders: FLAME FIERCE [CR poem]
Sanders: FROWNING FATES [MHS-vol7 poem]
Sanders: Happy HOOLIGAN... [CR bio]
Sanders: HEALTH and HAPPINESS [CR poem]
Sanders: A HEALTH to HOLLIS [CR poem]
Sanders: HUMBLE HISTORIAN [CR bio]
Sanders: ALaddin's LEGENDARY LAMP [MHS-vol7]
Sanders: the LIVID LIGHTNINGS fLashed [MHS-vol7 poem]
Sanders: MERRY MONTH of MAY [CR bio]
Sanders: MILD-MANNERED [CR bio]
Sanders: MUCH ADMIRED the MANLINESS of the MAN
Sanders: aMUSE the MUSING MINERS with the MUSIC of MY MUSE [CR poem]
Sanders: MIGHT MAN at the ore [CR poem]
Sanders: PRIMROSE PATH [CR bio]
Sanders: we took a PROMINENT PART, and we PROVED our physical PROWESS
Sanders: POSITIVE, PROBABLE, and POSSIBLE ore reserves [ML1913]
Sanders: when thus PLACED the PASSAGE PRESENTS a PLEASING aPPearance.
Sanders: his SAY was SAID
Sanders: best SHAPE for a SHAFT [letter to mining journal]
Sanders: it is a SHORT, SIGHTLY, and SIMPLE name [L-1896]
Sanders: SOME SEASONS were SPENT [CR bio]
Sanders: STOP him until his SAY was SAID
Sanders: loST STRAYED or STOLEN [heading above photos]
Sanders: TO TAKE TO TEACHING school [CR poem]
Sanders: TROUBLED and at TIMES TEMPESTUOUS SEAS of SCIENTIFIC learning [CR bio]
Sanders: VAGRANT and VAGABOND [CR bio]
Sanders: And long you've WANDERED WIDE [CR poem]
Sanders: WAILING WINTER'S WINDING shroud [MHS-vol7 poem]
Sanders: because of the WICKED WASTE of ink [ML1913]
Sanders: to WITHER as it WAILED [MHS-vol7 poem]
Sanders: Here his WORK is WORTHY and WORTHILY done. [CR bio]
Sanders: WRECK of WORLDS.

## e) French and other foreign terms

Both Sanders and Erdnase include foreign (especially French) terms in their writing.
Erdnase: beté [sic] noir; denouement; Beau-monde; entrée; congé; ad libitum
Sanders: mon cherez frères d'amie; coups des main; chapeaux; retrousse; esprit de corps; de luxe; "de gent"; avec corps de sanitation; salud!; terra incognita; aber nit

François Tonneau (in private correspondence) observes that Erdnase and Sanders make similar mistakes in French terms by using an accented "e" sound (AY - as in the long A in cAke) when none is warranted. Erdnase does this in "beté noir" (BET-AY), which should be "bête noire" (BET). Sanders mistakenly writes "coups des main" (coo DAY man) vs the correct "coup de main" (coo DUH man). Note that in other cases, Sanders uses the correct "de" vs "des" (in "esprit de corps"; "de luxe"; "de gent"; "avec corps de sanitation").

Sanders elsewhere writes, "mon cherez frères d'amie", which is hard to parse. The start is reminiscent of "mon cher frère" (my dear brother), but following it with "d'amie" (= "of my [female] friend") makes no sense. Also, Sanders mixes plural ("frères") with singular ("amie"). But as above, he adds a trailing AY in "cherez" vs no trailing accent in "cher."

In appears as though Sanders and Erdnase heard the terms or phrases mispronounced in English (as is common) and transcribed them accordingly, without knowing the correct word form and orthography. This suggests that both men had a similar imperfect knowledge of French.

## f) Puns and related wordplay

Erdnase: The Longitudinal Shift -- This SHIFT, for which we have to thank no one, is given a VERY LONG NAME, but the reader who is interested sufficiently to practice the process, will find it a VERY SHORT SHIFT [p130]
Sanders: SHIFTED some more cars up to the platform...Glad to hear the noon whistle and still more so to hear the evening's signal for the end of the SHIFT.

The corresponding puns on "shift" above were discovered by Marty Demarest. Many of the puns below were first identified by Bill Mullins and Marty Demarest and pointed out in the Genii Forum.

Erdnase: The RIGHT hand holds the WRONG card... [p151]
Erdnase: Several cards are REMOVED entirely from the pack, but RETAINED in the memory... [p116]
Erdnase: The DEALER can gather up the cards with a great DEAL of judgment... [p82]
Erdnase: In the average game where the players keep their hands, and ARMS also, on the table there is little opportunity to shift the cut [p111]
Erdnase: covered for the smallest SPACE of TIME [p144]
Erdnase: a few repetitions of the same formula enables one to STOCK AND TALK at the same time. [p74]
Erdnase: certain knowledge that his more respected brother of the stock exchange possesses, viz. MANIPULATION is more profitable than SPECULATION; [p10]
Erdnase: Without ability to control his feelings the "ADVANTAGE player" is without ADVANTAGE. [p22]
Erdnase: Where the gaming rooms must be conducted in secret the probabilities of the player's apparent chances being LESSENED are much GREATER. [p11]
Erdnase: His fortune is literally at his FINGER ENDS, yet he must never admit his skill or grow CHESTY over his ability [p23]

Sanders: the parts of which, proportioned to any required dimensions, are so FITTED together at the joints...Their present general use may be said to represent a SURVIVAL OF THE FITTEST. [RSMW]
Sanders: Am sore all over, blisters on hands, boots which I am trying to break in are breaking me up...
Sanders: along with heart-failure we had a sudden change of heart [CR bio]
Sanders: You may distillate or early [distillate ~ late (or early) -- Clark worked on distillation of turpentine] [CR poem]
Sanders: Still your record you hold, mighty man at the ORE! -- (for G.B. Lee, on rowing team. Pun or oar/ore ) [CR poem]

Sanders: He's selim and selender, but, BLAME ME! -- (homophone of AMY, his classmate and poem's subject) [CR poem]
Sanders: And he'll go very far, allee SAMEE. -- (homophone with AMY, the subject of the poem) [CR poem]
Sanders: You'd ne'er miss such impossible lyres. (on Marie. Pun on lyres/liars) [CR poem]
Sanders: For, Noble, you done noble and you are (on Louis S. Noble) [CR poem]
Sanders: As backward through the Book of Time...A dear and treasured Page (on George S. Page) [CR poem]
Sanders: And while Doolittle you may be, Doolittle, you do much. [CR poem]
Sanders: We wish thee joy, thou Angel heart, and here's a cup to you! (angel heart ~ E.N. Engelhardt) [CR poem]
Sanders: Now don't you, Me Boy -- ("Me Boy" ~ "Bemis" on Fred Bemis) [CR poem] [** See note below]
Sanders: Though your face it was beaming -- ("beaming" ~ "Bemis" on Fred Bemis) [CR poem]
Sanders: And we drink his health in LIQUID / That contains a sthick to LICK WID; [CR poem]
Sanders: Aren't you tired of constructing such finely drawn wire?- / It's a subject that seems long drawn out, Sir! [CR poem]
Sanders: and, needless to say, like most of the Arizona gold-mines, the bottoms of the prospects and the company's bank-
account were soon reached. [CR bio]
Sanders:The world for you has been too small, / And LONG you've wandered WIDE [CR poem]
Sanders: The "Eagle Works" you long have run, and long have there BENZINE -- (benzine = been seen) [CR poem]
** Note: The wordplay with Bemis above (with the leading syllabic consonants (B,M) permuted into "Me Boy") is signaled by the capitalization. And the phonetic importance of Bemis is also reinforced elsewhere in the poem by the near homophones of "Bemis" and "beaming". This bit of wordplay is particularly interesting in that it mirrors the ("Ruse And" $\leftrightarrow$ "Andrews") shuffling observed in the book's title.

## Conclusion

Prev Next Table of Contents

The case for W.E. Sanders as S.W. Erdnase is strong. It started with the original supposition by David Alexander and Richard Kyle that the author's pseudonym was a full anagram and that the obvious backwards spelled name of E.S. Andrews was a throw-off. That expanded the search of possible candidates, eventually yielding W.E. Sanders, an author and mining engineer and son of Montana's first Senator. As a member of a prominent family, Sanders had every reason to disguise his identity and perfectly fit the profile already established (college educated, experienced writer, a Northerner, etc). Then the dam burst with the astounding discovery of Sanders' diaries and notebooks where Sanders played with anagrams on his own name. Marty Demarest's subsequent research greatly augmented his backstory and provided concrete proof of Sanders' involvement in both gambling and magic, including tantalizing references to his "other life." And, all the while, Sanders' compatibility with the recollections of the book's illustrator (M.D. Smith) reassures us that we're not being led astray.

In this document, we further advance the case by analyzing their respective writings. We find that Sanders' and Erdnase's writing styles are strikingly similar, not just linguistically but in the personality and modes of thought that shine through. And the texts reveal a number of intriguing thematic and biographical allusions that further argue for their common authorship.

While there's no absolute proof that the two men are one, the circumstantial evidence points strongly in that direction:

## - The author's name

- S.W. Erdnase is an anagram of W.E. Sanders
- Sanders played with anagrams of his name in his notebooks as a child. His interest in letter combinations (and other wordplay) on names continued into later life.
- Sanders had a strong motive for hiding his identity with a pseudonym (his father was a U.S. Senator). The obvious backwards spelling (E.S. Andrews) was an effective throw-off.
- "Erdnase" in German means "earth nose", apropos for a prospector and mining engineer. Sanders knew German.
- The book's subtitle suggests that the author's backwards name Andrews is itself a ruse ("artifice RUSE AND subterfuge..." $\rightarrow$ "And Ruse" $\rightarrow$ "Andrews"). Sanders performed similar phonetic transposition on the name of a classmate in one of his poems.
- The S.W.E. shift uses the author's initials (of the pseudonym) in order to "give it a name". If you perform a shift on those initials, you get W.E.S. (Sanders initials).


## - Gambling and magic

- Sanders purchased six decks of playing cards for a camping trip. Erdnase tells us why: "For superior work the cards should be new, thin, flexible and of best quality... Cards that have been handled two or three hours become more or less sticky, and the slightest friction is a detriment to perfect manipulation."
- Sanders frequented gambling houses. His letters allude to gambling debts. He refers to his "other life."
- Sanders' published writing refers to various gambling games (faro, poker, the shell game, etc) and terminology ("played on the square").
- Sanders included details about the card trick Mutus Nomen Dedit Cocis in his notebooks. He wrote in his diaries about seeing through the tricks of an illusionist.
- The one person known to be a friend of Erdnase was the magician Del Adelphia, who like Sanders was a Montana resident. The meeting with Del Adelphia occurred in Denver, in easy proximity to Sanders who traveled extensively throughout the West.
- Biographical matches
- The patter for one of the most prominent tricks ("The Divining Rod") in EATCT centers around prospecting for gold and archaeological preservation -- both professions of Sanders! Another prominent trick ("Congenial Coterie") echoes Sanders' background in private salons and clubs. These are the first two tricks in the Legerdemain section.
- Sanders was experienced with publishing. He probably had knowledge of copyright law (via clerking on his father's Senate committee).
- Sanders was working on a book in 1900. Mine Timbering wasn't published until 1907 and only contained two articles by Sanders, one of which had already been published. Was this book EATCT?
- Sanders was near Chicago at the right time: December 1901 and the hotel meeting with Marshall Smith.
- Sanders was a good match with Smith's recollections. Similar physical attributes (age, size, demeanor); name had a "W"; Dalrymple family connection.
- Erdnase refers to himself in his youth as a "self-satisfied unlicked cub with a fairly fat bank roll." This is an apt description of Sanders who came from a prosperous family and attended prep school in New England and college in New York.
- Sanders grew up on the Frontier in Montana, and we find in EATCT a significant number of images and phrases (e.g., "flush the quarry" and "trap shooter") that evoke country life.
- Shared linguistic traits. Sanders was an experienced writer. And like Erdnase, he writes in a very incisive and selfassured manner. A side-by-side comparison of their respective texts exhibits unmistakable similarities in word choice, phrasing, and stylization. Some examples:
- Similar spelling anomalies, including the same unorthodox spelling of the card game Cassino.
- Use of foreign terms and phrases, often in French. ("beté noir", "esprit de corps")
- Use of puns, including on same word "shift"
- Use of "scare quotes", including on the same short idiomatic phrase "make good".
- Use of parenthetical punctuation. ("careless (?) dealer", "quite a professional (?) cuisiner")
- Use of colloquial speech. ("De suckah, he'll get a han' all right, suah!", "langwidge, "Consarn yer blawsted nerve"). Sanders had a particular interest in African American speech patterns and culture.
- Use of alliteration, sometimes on same words ("wiles and wickedness", "wicked waste") when addressing the same topic (hypocritical "professionals").
- Direct multiword matches. For example:
- Erdnase/Sanders: "may be employed advantageously under (special circumstances I all conditions)"
- Erdnase/Sanders: "as it is utterly impossible"
- Extended patterns of word overlap and meaning. For example in the following (for the sake of brevity, designate, certain terms/symbols, describing, various):
- Erdnase: "we have, in describing the various processes and conditions, used certain terms FOR THE SAKE OF BREVITY to designate the particular matters referred to."
- Sanders: "FOR THE SAKE OF BREVITY in description certain symbols letters or figures, are employed to designate the various mine workings"
- Metaphors and visual images. E.g. about rapidly learning when younger from experience (imbibe/pick up, knowledge/wisdom, copious/vast, chunks/draughts).
- Erdnase: "We naturally began to imbibe wisdom in copious draughts at the customary sucker rates...and the sum of our present knowledge is proffered in this volume."
- Sanders: "We did a lot of hustlin' then and gained a heap of knowledge and picked vast wisdom up in chunks in many various lines."
- Shared personality traits (as revealed in their writing)
- A strong aesthetic sense ("very pretty, "the beauty of", "grace"") and a reverence for excellence ("to attain the highest degree of excellence" vs "to maintain a high standard of excellence"). An insistence on the importance of both study (curriculum, take a post-graduate course) and "practical observation/experience."
- An emphasis on the importance of details and rigor (consistent with Sanders' scientific training), using terms and phrases like "axiom" and "facts and conditions". When describing a sleight, Erdnase says "the IMPETUS and DIRECTION given to each card must be nicely CALCULATED" much as a physics student would describe the trajectory of body in motion after a force has been applied to it.
- A delight in mocking hypocrisy and vanity (including their own), using some of the same terms, metaphors, and alliteration.
- An attraction to risk-taking behavior.
- Erdnase: thrill of "making the hazard" and "bucking the tiger"
- Sanders: "wild delights and exhilarating influences of the mining profession".
- Concern for the etymology and the derivation of terms and methods, including calling out common misnomers. Sanders even wrote a whole article on the origins of the name "Montana."
- Care and pride in the condition of hands.
- Inventive and organized. Devised general SYSTEMS to cover a variety of cases.
- Erdnase: Systems of Palming, Culling, Stock Shuffling.
- Sanders: Reference Scheme for Mine-Workings ("a system ... capable of being extended to cover all possible exigencies and conditions").

More can be done to further develop the textual evidence. Some avenues of research:

- New linguistic parallels can be identified, and deeper analysis performed to illuminate those already identified.
- Additional Sanders' writings can be examined (e.g. his diaries and notebooks). And possibly others can be found.
- Statistical analysis can be performed on the common thematic words and other lexical patterns found in the texts versus other authors of the day, in similar and different genres.
- Computational techniques can be applied to "mine" both writers' texts to discover additional syntactic and semantic patterns.


## Appendix: Tables of common thematic words

## Prev Next Table of Contents

The following tables include relatively ordinary terms that Erdnase uses over and over. These words are not unusual, in and of themselves, but they represent the themes of [rigor/precision], [excellence], and concern with [methods]. Some of these themes (and associated terms) are what you would expect in technical procedures and descriptions. Nonetheless, these words and their themes are worth emphasizing, as they show up repeatedly in a great many of the more linguistically interesting examples presented earlier.

The word counts collected below are exploratory and not intended, at this stage, to be complete or to prove anything. They are provided primarily as raw data to test intuitions about how common words mesh with the themes of the two writers (in contrast to the more distinctive phrases and idioms highlighted in the document above).

The words below were obtained by examining an automatically sorted list of words and their counts from Erdnase. The salient words, matching the criteria, were selected and counts performed from Mine Timbering and EATCT. Wildcards (denoted with a asterisk) were used to capture variations of word forms. For example "precis*" will match "precision", "precise", "precisely". Also note, the distinction between thematic words (included below) and topic words (excluded). This is roughly analogous to the linguistics notion of function words versus content words. Topic words would include words particular to or closely associated with the domain at hand (e.g. "minerals", "shuffle"). Thematic words closely associated with the domain topic were also omitted. For example, "execute" fit the [methods] theme but is tightly tied to an actionoriented domain (e.g. sleight of hand moves).

Most often, only word counts are provided below. But for some of the more salient words, sample sentences are also given to give a flavor how how they are used. Mine Timbering contains roughly 16 K words compared to 56 K words in EATCT (roughly $28 \%$ as many words). One future step would to present these counts normalized relative to the length of the text (along with other stats like number of individual words in the text, etc). Also to count these same thematic words in other Sanders' writings and in other writers of magic/gambling and mining literature of the time.

In a couple cases below, counts from other Sanders mining articles are included. In the process of collecting these counts, it becomes apparent how much genre and domain (e.g. between Sanders' Montana article and his mining articles) and random variation affect word counts and other characteristics of the language found. Similarly, EATCT has three quite different sections with different linguistic properties: the long introduction, the main sleights sections, and the card trick section. As an example of how sensitive word counts are to domain, consider the word "sufficient" and its variants ("sufficiently", ...). Erdnase uses it 21 times; Sanders uses it 13 times in Mine Timbering but not at all in his college class reunion writing.

Note: That these words are very frequently used by both writers is illustrated by the fact that many sentences include several of these terms. For example, this phrase by Erdnase contains seven!!
"...to OBTAIN a PERFECT UNDERSTANDING of the METHODS EMPLOYED, and the EXACT MANNER in which they are executed."

## Rigor

| Word | Counts | Samples |
| :--- | :--- | :--- |
| exact* | 13 | Erdnase: a perfect understanding of the EXACT manner in which it is performed [p52] <br> Sanders: must coincide when the true edge is EXACTLY vertical |
| invariably | 11 | Erdnase: The beginner INVARIABLY imagines his hands are too small... [p24] <br> Sanders: the bark should INVARIABLY be removed from the round timbers... |
|  | 5 | Erdnase: we have, in describing the VARIOUS processes and conditions... [p25] <br> sanders: The framing of the VARIOUS sized shafts is very similar |
| *necessar* invariably, various, ...) | 25 | 21 |


| Word | Erdnase | Sanders |
| :--- | :--- | :--- |
| absolute* | 17 | $0(1$ in $[$ MHS-lib] $)$ |
| *assume $^{*}$ | 8 | 3 |
| because | 12 | 4 |
| *calcul | 18 | 0 |
| consequently | 8 | 0 |
| correct $^{*}$ | 3 | 2 |
| *depend $^{*}$ | 10 | 7 |
| *distinct | 3 | 4 |
| effectually | 8 | 0 |


| essential | 7 | 2 |
| :--- | :--- | :--- |
| exact* | 13 | 11 |
| hence | 7 | 0 |
| however | 26 | 8 |
| invariably | 5 | 12 |
| *known* | 28 | 15 |
| well known/well-known | 6 | 1 |
| must | 75 | 10 |
| *necess* | 36 | 31 |
| *necessar* | 29 | 27 |
| never | 24 | 0 |
| *possib* | 50 | 13 |
| precise*/precision | 2 | 4 |
| *probab* | 20 | 3 |
| *prove* | 17 | 1 |
| reason** | 15 | 5 |
| *regular* | 31 | 5 |
| require* | 43 | 23 |
| rule | 17 | 0 |
| shall | 54 | 14 |
| thereby | 10 | 3 |
| therefore | 4 | 6 |
| thus | 9 | 14 |
| true | 19 | 10 |
| *understand* | 25 | 0 |
| var* | 25 | 21 |
| wherein | 3 | 0 |
|  |  |  |

## Degree/amount/precision

This table groups terms that denote a degree or position on a linear scale, including relative positions.

| considerable | 8 | Erdnase: This method requires CONSIDERABLE practice, [p67] |
| :--- | :--- | :--- |
|  | 7 | Sanders: in adits the set is often aligned with CONSIDERABLE exactness |
| utmost | 3 | Erdnase: An expert can run the whole deck with THE UTMOST rapidity [p58] |
|  | 2 | Sanders: huge timbers that have been frames with THE UTMOST precision |


| Word | Erdnase | Sanders |
| :---: | :---: | :---: |
| absolut* | 17 | 0 |
| at times | 3 | 2 |
| barely | 5 | 0 |
| *common* | 17 | 3 |
| *complete* | 36 | 12,0 (earth) |
| considerable | 8 | 7 |
| extreme* | 9 | 2 |
| extent | 13 | 2 |
| entire* | 31 | 6 |
| exception* | 4 | 3 |
| *frequent* | 2 | 13 |
| greater | 19 | 9 |
| greatly | 8 | 3 |
| identical* | 6 | 4 |
| infinit* | 4 | 0 |
| moderate* | 2 | 0,1 (earth) |
| nearly | 5 | 3 |
| often | 7 | 21 |
| ordinar* | 34 | 2 |
| practically | 5 | 4 |
| prevalent | 4 | 0 |
| primary/primarily | 3 | 1 |
| rather | 13 | 5 |
| somewhat | 6 | 4 |
| thorough* | 21 | 1,0 (earth) |
| throughout | 5 | 10 |
| *usually | 13 | 21 |
| utmost | 3 | 2 |

## Methods, Systems, processes

| employ* | 44 <br> 31 | Erdnase: it is usually EMPLOYED TO receive and bring a selected card to the top [p130] <br> Sanders: when posts are EMPLOYED to form the complete square shaft set. |
| :--- | :--- | :--- |
| manner | 78 <br> 10 | Erdnase: the exact MANNER in which it is performed [p52] <br> Sanders: brought to their places in the same MANNER as has been described |
| method | 119 |  |
| 75 |  |  | | Erdnase: This METHOD requires considerable practice, [p67] |
| :--- |
| Sanders: while the METHOD OF timbering is extremely simple it is unsatisfactory... |


| combination* | 8 | 5 |
| :--- | :--- | :--- |
| employ* | 44 | 31 |
| enable | 26 | 2 |
| limited/limits/limitations <br> (Erdnase: limited. Sanders: others) | 3 | 4 |
| manner | 78 | 10 |
| need* | 10 | 6 |
| obtain* | 30 | 7 |
| overcome | 4 | 3 |
| permit* | 13 | 1 [+3 elsewhere] |
| prefer* | 5 | 5 |
| prevent* | 16 | 10 |
| principal(ly) | 17 | 2 |
| purpose | 42 | 8 |
| remain* | 22 | 4 |
| result* | 9 | 4 |
| system* | 17 | 28 |

## Excellence

| accurate* | $\begin{aligned} & 4 \\ & 1 \end{aligned}$ | Erdnase: The correct positions and movements can be ACCURATELY secured. [p24] <br> Sanders: they will join ACCURATELY with those of the other connecting parts of the set |
| :---: | :---: | :---: |
| advanced | 0 1 | Sanders:FAR IN ADVANCE of that in use among the older and less progressive mining communities. |
| *correct* | $\begin{aligned} & 3 \\ & 2 \end{aligned}$ | Erdnase: If this position is secured CORRECTLY the tips of the Sanders: the framing of all the parts CORRECTLY done |
| excellent | $\begin{aligned} & 9 \\ & 4 \end{aligned}$ | Erdnase: The latter position is AN EXCELLENT ONE [p134] <br> Sanders: this joint is without doubt AN EXCELLENT ONE |
| perfect* | $\begin{aligned} & 70 \\ & 5 \end{aligned}$ | Erdnase: PERFECT ability to run the whole deck through in this manner [p26] Sanders: on the strength of materials he's surely PERFECTION |
| proper* | $\begin{aligned} & 22 \\ & 18 \end{aligned}$ | Erdnase: PROPERLY performed, it is impossible to detect the ruse. [p42] <br> Sanders: it also prevents the pieces from becoming PROPERLY seasoned |
| satisf* | $\begin{aligned} & 14 \\ & 6 \end{aligned}$ | Erdnase: to perform the action in anything like a SATISFACTORY manner [p122] <br> Sanders: while the method OF timbering is extremely simple it is UNSATISFACTORY... |
| sufficient* | $\begin{aligned} & 21 \\ & 13 \end{aligned}$ | Erdnase: just barely SUFFICIENTLY to hold the deck in place, [p54] <br> Sanders: beyond the side of the chute into the tramway SUFFICIENTLY far to allow... |
| superior | $\begin{aligned} & 7 \\ & 2 \end{aligned}$ | Erdnase: believe them VASTLY SUPERIOR to others that have come under our observation. [p14] |
| utmost | $\begin{aligned} & 3 \\ & 2 \end{aligned}$ | Erdnase: An expert can run the whole deck with THE UTMOST rapidity [p58] Sanders: huge timbers that have been frames with THE UTMOST precision |

## Misc

| Word | Erdnase | Sanders |
| :--- | :--- | :--- |
| acquir* | 36 | 0 |
| alike | 4 | 0 |
| become | 17 | 7 |
| care | 27 | 4 |
| common (diff senses) | 13 | 3 |
| conditions | 8 | 5 |
| constant | 10 | 0 |
| could | 8 | 0 |
| descri* | 51 | 6 |
| determine* | 18 | 1 |
| except | 7 | 6 |
| exped* | 5 | 0 |
| former | 6 | 8 |
| important | 9 | 6 |
| indeed | 6 | 2 |
| indicate | 17 | 0 |
| itself | 3 | 4 |
| latter | 3 | 14 |
| matter* [n/v] | 14 | 2 |
| occur* | 4 | 2 |
| perhaps | 10 | 0 |
| possess* | 17 | 1 [+7 columbia] |
| shown | 19 | 25 |
| success / (un)successfully | 18 | 5 |
| tend(s), tending, tendency | 6 | 7 |
| viz.: | 4 | 1 |
| whether | 9 | 4 |
|  |  |  |

# Appendix: Sanders' 1906 mining letter annotated (and Erdnase passage annotated) 

## Prev Next Table of Contents

The following section presents two extended passages (one from Sanders, and one from Erdnase) with corresponding excerpts from the other writer's texts. The first passage is a mining letter written by Sanders. The second is an Erdnase paragraph from the introductory Card Table Artifice section in EATCT.

Sanders wrote the following letter to a mining journal in 1906. In every sentence within it, he touches on many of the same themes, linguistic elements, metaphors, and sources of humor as Erdnase. In the annotation below, we show the mappings of various elements in the letter to similar elements in EATCT. At the core is the metaphor of laughably naive or deceptive written works related to PROFESSIONALS in the domain (mining, card table artifice) which are EXHUMED and encased in some outer container (MOSS-COVERED, ENCLOSING SHELL). In both, the idea is expressed in a highly ironic and satiric tone.

## Sanders mining letter

Sir- Some time ago, a report that was stated to have been the result of an examination made upon a mining property located on the vein formation of the famous Mother Lode of the western foothill region of the Sierra Nevada of California, came into my hands and has been carefully preserved (1) by me as a classic (6). That it is unique among many documents pertaining to mines and mining situations (2), a perusal of the following excerpts from the text will convince (3) any fair minded unbiased (4) mining engineer. Certainly in part it is too good to keep (5), and in a spirit of benevolence and as an offering upon the shrine of professional goodwill toward
professional brethren, the following extracts have been exhumed from their obscure place of burial (6) among files containing many another (7) mining report that is less picturesque, less unique (2). The following contains the rich kernel removed from the enclosing shell (6).
[three paragraphs of mining report quotes removed ...]
How plain and simple it all is to write a mining report. Not necessarily one that will 'stick' (8) but a picturesque and unique document that is readable and fairly well filled with data culled (9) in a measure from geologic reports and folios of the region or from other vicarious sources and containing more or less uncertain assumptions (6) and statements as to ore values and to positive, probable, and possible ore reserves that from their very artlessness and possible ore reserves that from their very artlessness and to carry a satisfactory weight (10) when their authors are brourht 'upon the carpet', (8) And how many reports presuming $(6,10)$ to describe mining properties are written that should never have been penned becaus the wicked waste of ink resulting therefrom ( 6 ). because of the wicked waste of ink resulting therefrom (6).

Wilbur E. Sanders
Sonora, California, July 6

## Erdnase

1 The secrets of professional card playing have been well preserved.
2 this work stands unique in the list of card books.
A careful perusal of the following definitions will save
3 much time and perplexity in comprehending the processes described

4 some gentleman in the audience who is desirous of giving my ability a fair and impartial test
5 A self-satisfied unlicked cub with a fairly fat bank roll was too good a thing to be passed up.

Self-styled "ex-professionals" have regaled the public with astounding disclosures of their former wiles and wickedness, and have proven a wonderful knowledge of the subject by exhuming some antiquated moss-covered ruses.
6

- classic; antiquated, $\Leftrightarrow$ moss-covered
- kernel from enclosing shell $\Leftrightarrow$ moss-covered ruses
- presuming; uncertain $\Leftrightarrow$ ruses
- wicked waste $\Leftrightarrow$ wiles and wickedness (alliteration)

7 the reputation is liable to precede him in many another.
Scare quotes: to "make good", "pretty money", "squeals",
8 so-called "victims", "ex-professionals", can be "doctored", of the two "blockouts"

9 These examples of culling, if fairly well executed,

* is inartistic, and risky, and unworthy of any but a neophyte or a bungler
10 * This clumsy jugg ling might prove satisfactory if performed by an awkward novice before a parcel of school children but it appears simply ridiculous in the hands of a card conjurer, who, it is presumed, knows how to shuffle a deck in the customary manner

The following Erdnase passage [p14] touches on several themes that are echoed in Sanders' writings, sometimes in almost identical words. The main theme is his INSUFFERABLE CONCEIT and acquiring WISDOM (in LARGE QUANTITIES) in the "COLD SCHOOL OF EXPERIENCE". In addition there are several subsidiary themes as well as linguistic constructs that are used by both writers.

| Erdnase |  | Sanders |
| :---: | :---: | :---: |
| We betray no confidences in publishing this book, having only ourselves to thank for what we know. Our tuition was received in the cold school of experience (1). We started in with the trusting nature of a fledgling, and a calm assurance born of overweening faith in our own potency. We bucked the tiger voluntarily, and censure no one for the inevitable result. A self-satisfied unlicked cub with a fairly fat bank roll (2) was too good a thing to be passed up (3). We naturally began to imbibe wisdom in copious draughts (4) at the customary sucker rates, but the jars to our pocketbook caused far less anguish than the heartrending jolts (2B) to our insufferable conceit (2). After the awakening our education progressed through close application and constant study (5) of the game (1), and the sum of our present knowledge is proffered in this volume (6), for any purpose it may answer, to friend and foe, to the wise and the foolish, to the good and the bad, to all alike (7), with but one reservation, that he has the price (8). | 1) | So, Huntington, you quit the game Our Mining Engineers have played, Through arctic cold and tropic flame Oft, worn and torn, we've plied the trade. <br> The courses we poured over, the studies over which we burned the midniaht oil. the subiects of the curriculum |
|  | 2) | In these extracts, Sanders A) mocks his own conceit, B) idealizes its opposite, and C) contrasts vain boasting with true (reckless) courage. <br> A. [Sanders mocking his own conceit] <br> to hear him talk of the pace he's set; an' of what he's done, for he's braggin' yet; ... but I know you, Bill, an' you can't fool me! <br> B. [Idealized:heartrending $\Leftrightarrow$ heart-satisfying, jolts $\Leftrightarrow$ rewards, buck tiger $\Leftrightarrow$ brave] <br> heart-satisfying rewards that can come to "a brave man struggling in the storms of fate," <br> C. [Contrastive] not given to vain boastings....that high and reckless courage |
|  | 4) | * and the joke, too good to be permitted to die early <br> * Certainly in part it is too good to keep, and in a spirit of benevolence .... <br> We did a lot of hustlin' then and gained a heap of knowledge and picked vast wisdom up in chunks in many various lines. |
|  | 6) | Of the exams that were sent by Providence to keep us in constant terror <br> present collection, which is offered not as a complete treatise on the subject, but rather as a series of essays which go fully into many important details |
|  | 7) | for good or ill, for better or for worse, for affairs great and affairs small |
|  | 8) | He asserts he is still able to eat three large meals per day -- "when I have the cash"! |

## Appendix: Sanders' and Erdnase's vocabulary

## Prev Next Table of Contents

As seen, Sanders had facility with language in various forms, using foreign terms, colloquial and dialectical speech, and his own humorous neologisms (cyclopaediculous) in a natural, unforced manner. He also had a very well-developed vocabulary, an outcome of his education and experience as a writer. Erdnase, likewise, had a talent for picking just the right word, and clearly was a well-educated person and experienced writer. While it is somewhat subjective as to what constitutes an "advanced" or "well-developed" vocabulary, we list below words in their writing that can be considered to match that criterion. Words that are used by both authors are capitalized.

Sanders: abatement, abiding, ablative, abode, abridged, accretion, accusative, adorn, adulation, alluvial, ambient, antepenult, antedates, APPARATUS, appellation, appropriation, apropos, ardently, ASCERTAINED, attenuated, AUDACITY, averment, azure, baleful, be-dimmed, beatitude, benedictions, BREVITY, burgesses, callow, cannonading, carnage, celestial, cessation, cherubic, chronicles, coaelsced, cognomen, colloquy, companionable, COMPELLED, CONCAVE, connubial, consecrated, consigned, contiguous, contour, contradistinction, CONTRIVANCE, contrive, controverted, conversant, conversely, convivial, convolutions, cordially, corroborative, corrugate, cosmopolitan, COUNTENANCE, COUPS, CULMINATE, CURRICULUM, cutaneous, DALLIANCE, DATA, decrepit, delectation, DELETERIOUS, DENOTING, DEMEANOR, DESIGNATION, DETRIMENT, differentiation, dilated, discordant, DISPERSED, DISPOSITION, disseminating, distempers, dithyrambic, divergent, DIVININ' dolefully, domiciled, doughtily, effervescent, elliptical, emblazoned, embowered, enactments, encomiums, ENDEAVOR, engendered, ENUMERATION, envenomed, epochs, ethnology, etymologically, euphonic, excrescence, excruciatingly, excursions, exhaustive, exigencies, exodus, extant, fain, fauna, facetiously ("faseeshusly"), felicitation, fidelity, flippant, fragmentary, frolicsome, furtive, galore, gastropods, hexagonal, hexameter, homily, hypothesis, idyllic, immemorial, imperative, inaugurated, incalculable, incidental, incipient, incontinently, indelibly, indomitable, INDUCED, inference, inflection, ingenuousness, innocuous, instrumentality, interregnum, intervening, INTIMATION/INTIMATE (verb), isometric, issuance, jocund, joyance, jurasic, LATERAL, laudable, legation, LIABLE, LONGITUDINAL, luridly, maelstrom, malice, MANIFESTLY, mien, moiled, mouldered, mussed-up, mutation, myriad, nefarious, negligable, nominative, oblation, obliquely, octagonal, ordinances, parallelism, paramount, paraphernalia, pedagogic, pentameter, penult, perambulating, perpendicular, pertaining, picturesque, pinnacle, plaintive, polygonal, ponderous, portentous, precarious, premises, pristine, privation, prosaic, procrastinating, prospective, pugilist, qualification, quest, raiment, rambunctious, reminiscences, renders, repines, reprove, retrospection, roistering, rotund, sanguine, sauntering, scintillate, segregation, semblances, sepulchre, sequestered, serenade, sinuosities, skeins, solicitude, soliloquize, stenographically, SUBLIME, SUBSEQUENT, subsidiary, succulent, suffice, superfluous, superseding, sylvan, tandem, tawny, temerity, tempestuous, tenacity, topographical, torrid, transpire, transverse, travail, truncated, turbid, ulsters, unceremoniously, unobtrusive, unscrupulous, untoward, vagabonding, vagrant, veneration, verbatim, verity, vicarious, vicinage, vicissitudes, vocative, waning, warrant, WHATSOEVER, wresting

Erdnase: abhorrent, ableist, accede, acme, actuated, adage, adjuring, alacrity, allaying, antiquated, APPARATUS, ASCERTAIN, AUDACITY, auditors, besiege, bosh, BREVITY, cant, censure, chicanery, cognition, commensurate, COMPELLING, COMPREHENSIVE, CONCAVE, confine, congenial, conning, consequences, consequently, CONTRIVANCE, convex, copious, coterie, COUNTENANCE, covertly, COUPS, criterion, CULMINATES, cultivate, cupidity, CURRICULUM, cursory, cuticle, daintily, DALLIANCE, DATA, DENOTE, DESIGNATE, DETRIMENT, DEMEANOR, denominations, denouement, denunciation, deportment, diatribe, diffident, diminished, disabuse, disconcerting, discretion, disdains, DISPERSED, DISPOSITION, DIVINING, effectually, elucidated, ENDEAVOR ENUMERATION, erroneously, erstwhile, essaying, exhaustive, expectorate, expedient, expeditiously, finesse, galling, garnished, guile, homage, hypocritical, imbibe, impelled, impetus, importuned, imposition, impoverish, improvident, imputation, incessant, incidental, incredulity, indistinguishable, INDUCE, injunction, insufferable, interim, interpolation,

INTIMATE (verb), inviolable, LATERAL, LIABLE, liege, LONGITUDINAL, MANIFESTED, mealymouthed, misnomer, modus operandi, monologue, neophyte, nonchalantly, nonplus, oblige, obviates, opportune, ostensible, ostentatiously, overweening, palaver, partiality, patrician, perusal, perpetuate, perplexity, piety, plausible, plebeians, presumptuous, pretext, prevalent, prodigals, proffer, prolific, proposition, protracted, proximity, qualms, quarry, regaled, repertory, requisite, retard, rigamarole, rotary, sidling, smattering, sophistry, stoic, strategem, SUBLIMEST, SUBSEQUENT, subterfuge, supposition, tacit, tact, talismanic, vagaries, vehemently, unfathomable, unostentatious, unstinted, untutored, veracity, WHATSOEVER

We note that Sanders' list of words is quite a bit longer. This is largely a result of the different domains and genres he wrote in. If we looked only at Sander's mining texts, his list would be significantly reduced. Note also that mining-centric and overly technical words (e.g. "stopes", "equilibrium", "metalliferous", "kaolinization") were omitted. Overall, one gets the sense that their working vocabularies are roughly equivalent and point to an experienced writer with a college education.

## Appendix: Other reversed and anagrammatic pen names

## Prev Next Table of Contents

S.E. Erdnase was clearly a pen name, whether it was a simple reversal or an anagram. The following are examples of magicians, authors, and others who have used reversed or anagrammatic names. The great majority of these were found, compiled, and annotated by Bill Mullins and posted in the Genii Erdnase thread. Others were identified by Joe Pecore, Edwin Corrie, and Tom Sawyer on the same or other Genii threads. One source is Dictionary of Anonymous and Pseudonymous English Literature, Volume 3 By Samuel Halkett. Some additional reversed names can be found here.

Pre-1902 examples from magic include:

- Hercat (real name R. D. Chater), born ca. 1843, and performed widely in the US and England in the latter part of the 19th century
- Ornum magic emporium in London, owned by George Munro, and advertised in The Showman in 1900


## Pre-1902 examples:

- Alcofribas Nasier (real name Francois Rabelais). In 1532, under the pseudonym Alcofribas Nasier (an anagram of François Rabelais), he published his first book, Pantagruel King of the Dipsodes, the first of his Gargantua series. Wikipedia
- Arnold Lacretie (real name Jules Claretie), French 19th cent writer
- Barry Waller, Poet (real name Bryan Waller Procter), English early 19th century poet
- Cadenus. Poem: "Cadenus and Vanessa" (1713). Anagram of Decanus (the dean). By Jonathan Swift 1667-1745.
- Catherine Childar (real name Annie Catherine Charlotte Aldrich). Wrote The Double Dutchman
- Challudie (Simon) (real name Charles Du Moulin). French jurist. 1500-1566. Changed the U to an I.
- Cycla (real name Helen Clacy). Wrote Passing clouds (1858)
- Dalmocand (real name George Macdonald). Issued a volume Poems and Essays... (1851)
- Dralloc (real name John Collard), 18th cent English logician
- Drawde Rekatihw (real name Edward Whitaker) (1681)
- Edgar Cuthwellis and Edgar U.C. Westhill (real name Charles Lutwidge Dodgson). He considered these before adopting Lewis Carroll as his pen name.
- Eidrah Trebor (real name Robert Hardie). Published Hoyle made familiar (1830)
- Ekalenna (real name Anne Lake) - The Beauty of Holiness and other poems (1871)
- F. Pylodet (real name F. Leypoldt), 19th cent German-American writer
- Grubendol (real name Henry Oldenburg). A German writer who lived in England. 1619-1677
- H. Trusta (real name Elizabeth Stuart Phelps), 19th century American writer
- James Hasolle (real name Elias Ashmole), 16th century alchemist (anagrammists of old would substitute J for I)
- Job Crithannah (real name Jonathan Birch). Wrote Fifty-one fables, with morals and ethical index (1833)
- Johann Abricht (real name Jonathan Birch) 19th cent poet
- Nellerto (real name Don Juan Antonio Llorente). A Spanish historian. 1756-1823
- Nora Helen Warddel (real name Edward Heron Allen). Issued The Romance of a quiet watering-place (1888)
- Olphar Hamst (real name Ralph Thomas), author of The Handbook of Fictitious Names (1868)
- Ostilio Contalegni (real name Agostino Coltelini). Floretine poet. 1613-1693.
- P. H. Treleinie (real name Peter Heylin) English 17th cent author
- Partenio Etrio (real name Pietro Aretino) Italian 16th cent writer
- Pen Cler Jocelyn (real name Pierce Connelly). Wrote The Pope in England (1853)
- Professor Seiden (best known as Malini's teacher). Performed at Austin \& Stone's Museum in Boston in Oct, 1889. An account of the show: "Handsome Andy Gaffney will show his great strength, Prof. Seiden, wonder of magic, and Sig. Nedies, in equally wonderful seances."
- Redbarn Wash (real name George Bernard Shaw). Rearranging the letters in his middle and last name.
- Rednaxela Gnimelf (real name Alexander Fleming) (1840s)
- Rudolfus Otreb (real name Robertus Fludd) English 16th-17th cent physician
- Ryhen Pameach (real name Henry Peacham) English 16th-17th cent writer
- Salohcin Treboun (real name Nicholas Breton). Poet. (c. 1545/53 - c. 1625/6) 'Pasquil's Mistresse, or the Worthie and Vnworthie Woman; with his Description and Passion of that Furie, Jealousie,' 1600. The dedicatory epistle is signed 'Salohcin Treboun,' apparently an anagram upon Nicholas Breton. A unique copy is at Britwell. Wikisource
- Telliamed (title of work by Benoit de Maillet) French 17th-18th cent scientist
- Thorny Ailo (real name John Taylor; J for I substitution) English 16th-17th cent poet
- Trilussa (real name Carlo Albert Salustri). Italian poet. Started writing 1887
- Samuel Sheppard (1624-1655) wrote under pseudonym of Raphael Desmus
- Uriah Derick D'Arcy. The first vampire story written in America was "The Black Vampyre: A Legend of St. Domingo" published in 1819 in response to John Polidori's The Vampyre: A Tale by Lord Byron. It was written under the name of Uriah Derick D'Arcy. In the 1840s, it was claimed that the author's real name was Robert C. Sands, but scholars today believe it was written by Richard Varick Dey (a near-acronym; the V was changed to a U).
- Usinulca or Alcuinus (real name John Calvin). Theologian. From Calvinus, using V and U as identical letters. 15091564
- W. J. Andre (real name W. Jerdan) Scottish writer
- Walter Ramal (real name Walter de la Mare), English writer from 1890s

Others in Magic (post 1902):

- Bruce Cervon => Novrec (in the Novrec Turnover move)
- Charles Conrad $=>$ performed as Darnoc in the years before WW1.
- Charles Folkard => wrote under the name Draklof
- E. J. Norris => Sirronje (ca. 1905)
- Ed Solomon $=>$ Denomolos
- Edgar Beynon $=>$ The Great Benyon
- Ed Marlo => Olram subtlety
- Eugene Homer $=>$ performed as Rajah Remoh
- Herbert Levine => performed as The Great Nivelli
- Herman L. Weber (1900-1953) => performed as Namreh
- Ivor Parry => performed as "Rovi"
- Jack Avis => Siva
- James Swoger => sold tricks as "Regow's House of Enchantment"
- Joe Sinatra $=>$ Artanis
- John Calvert => wrote and directed a movie as John Trevlac
- Jules Lenier (1929-2007) $\Rightarrow>$ used "Reinel" as a pseudonum in The Talisman
- Martin Gardner => Nitram Rendrag and Armand T. Ringer
- Mel Stover wrote as "Rev. O. T. Slem" in A Fork Full of Appetizers II.
- Neil Foster (1920-1988) first starting performing under the name "Retsof" (but stopped when people erroneously called him "Ratsof")
- P. T. Tibbles => P. T. Selbit
- Paul Daniels and wife => The Eldanis
- Persi Diaconis $=>$ R. Sid Spocane II
- Philip J. Barnes => In the Jul 1913 issue of The Sphinx, a trick is credited to "Pejaie Senrab". He was Philip J. Barnes, the 25 year old son of a banker in Minneapolis. The same reversal (Barnes $->$ Senrab) was used by others. Billy Senrab ran the Senrab shows in vaudeville at about the same time.
- Walter Gardner (b. 1881) $\Rightarrow>$ performed as Retlaw Rendrag
- William F. Moore (1885-1959) => performed an illusion with a piano as "Onaip"
- William Mayoh => performed as Asian magician Ho Yam.

Other people (post 1902):

- Adnama. Amanda Lucas is George Lucas's daughter. In Attack of the Clones, she plays a character named Adnama.
- Alma Senkrah. Violinist. (real name Alma Harkness), 1864-1900
- Avida Dollars. Salvador Dali (as dubbed by the poet Andre Breton)
- Eivets Rednow. Stevie Wonder recorded as Eivets Rednow
- H.A. Largelamb (real name A. GRAHAM BELL). In June 1907, an article appeared in the National Geographic magazine.
- Hugo Gernsback (for whom the Hugo Award is named) wrote under the names Grego Banshuck, Greno Gashbuck, Kars Gugenchob, Gus N. Habergock \& Beno Ruckshagg.
- J. Darnoc. Actor William Conrad did voice work as J. Darnoc.
- Mr. Mojo Risin (real name Jim Morrison of the rock band The Doors). In song, "L.A. Woman".
- Nalrah Nosille. Science fiction author Harlan Ellison had a story called "Assassin!" published in the Feb 1957 issue of Science Fiction Adventures. Just a few months before, however, in Science Fiction Five-Yearly \#2 (Nov-Dec 1956), he started a serial called "!Nissassa" under the pseudonym of Nalrah Nosille
- Nireves Artist John Severin worked as "Nireves".
- P. Cinimod had a line of magic effects starting in the mid 1970s. From a Tannen's ad in 1976 "P. Cinimod spelled backwards is Dominic P. (Paolino). He's a clever magic inventor and innovator who keeps having moments of inspiration and putting them into good use for the benefit of magicians everywhere."
- Revonoc. Publisher Harvey Conover was lost at sea on his yacht Revonoc in 1958.
- Stuart Conover, the London correspondent for the N Y Dramatic Mirror, wrote under the name Revonoc in the early 1900s.
- Tom Ransom wrote as M. O'Snart
- Reg Everbest. (Comics) Steve Gerber wrote as "Reg Everbest."
- Retlaw Yensid => Walter Disney
- Reyam Sucram. The NY Clipper's San Francisco correspondent, Marcus Mayer, wrote as Reyam Sucram in the 1860s.
- Robert Trebor (American character actor)
- Tom Erwin Geris. Mort Weisinger wrote under the name Tom Erwin Geris.
- Wesli Court. Contemporary writer Lewis Turco has published under the name Wesli Court.
- Willis B. Rensie. Comic book artist Will Eisner published some material under the name of Willis B. Rensie.
- Xela. Alex Schomburg was an illustrator/artist who did the covers for a number of comic books and pulp magazines in the 1940s. For a while, he did them in an airbrush style, and would sign them "Xela" -- "Alex" spelled backwards.
- Yarrum Properties. A restaurant co-owned by Bill Murray in Charleston SC. He owns it through his company, Yarrum Properties.


## Others

- Remlap -- a small town in Alabama that is named for the Palmer family, who live in the area.
- Aloris tool posts -- a type of fixture for mounting tools on a machinist's lathe. Named for the inventor, Frank Sirola.
- Erewhon -- a novel (Nowhere) by Samuel Butler.
- Atticus Pund - the Poirot-style detective featured in the novel 'Magpie Murders' by Anthony Horowitz. The anagram is "A stupid..."


## Appendix: Literary allusions

## Prev Next Table of Contents

Sanders was quite well read and sprinkled literary allusions in some of his writings. The following allusions are based on a list compiled by Bill Mullins and originally posted in the Genii Erdnase thread.

From "The Word Montana, its significance, derivation and historical use." Mont. His. S. 7: 15-60, 1910.

- "Then came the hunter tribes. . . " p. 15. quoted from William Cullen Bryant, "A Walk at Sunset" (1821)
- "trend of pioneers" p. 16. Probably a misquote of "tread of pioneers" from John Greenleaf Whittier, "On Receiving an Eagle's Quill from Lake Superior" (1849)
- "to gain the wealth of Ormus and the newer Ind." p. 17. From John Milton, Paradise Lost.
- "The days of old, the days of gold, the days of Forty-nine" p. 18. Title of a folk song, from no later than 1860.
- "Sunt loca montana . . ." p. 23. Pliny the Elder, The Natural History
- "loca montana et . . ." p. 23. Titus Livius, The History of Rome
- "Exsurgens autem . . ." p. 23. Luke 1:39, from the latin vulgate Bible
- "Inter montana" p. 24. Deuteronomy 1:7, from the latin vulgate Bible
- "Perventum inde ad . . ." p. 24. Titus Livius, The History of Rome
- "homines asperi et montani" p. 26. Julius Caesar, Commentarii de Bello Civili (ca. 40 BC)
- "Many other examples of the metal ... " p. 30. Miguel Salvedra, "Trafalgar -- From a Spanish Point of View" in Grand Magazine, Nov. 1905
- "Beyond all titles . . ." p. 60. Alfred Lord Tennyson, Idylls of the King (1869)
- passing reference to the Argonauts, the Golden Fleece, Aladdin's lamp. p. 17; the Battle of Trafalgar (1805); and numerous quotations from and references to various contemporary histories of Rome.
- numerous quotes from and references to documents concerning the history of Montana, including books, letters from historians and pioneers, and the Congressional Record of 1863 regarding the establishment of the government of the Territory of Montana.
- numerous translations of and discussions of relevant Spanish, Latin and Native American words.
- extensive discussions of the first Europeans to explore the region over the previous two centuries, and their writings.

From Class of '85 School of Mines Columbia College Twenty-Fifth Anniversary Reunion (1911)

- "primrose path[s] of dalliance" from Hamlet Act I scene III.
- "We were monarchs of all we surveyed" p. 8. reference to "I am monarch of all I survey", a line from "Verses Supposed to be Written by Alexander Selkirk [inspiration for Robinson Crusoe]", by William Cowper, 1782
- "How the mighty have fallen" p. 30. 2 Samuel 1:27
- ". . . laying up vast treasures on earth" p . 30. Matt. 6:19
- "A brotherhood of venerable trees." William Wordsworth, "Composed at Neidpath Castle" 1803
- ". . . smile that won't come off" p. 30. Line from Quaker Oats advertising campaign of 1903.
- "Build a mansion in the skies" p. 33. "To mansions in the skies" is a line from "The Struggles of Flesh and Spirit" by Branwell Brontë 1836
- " . . . affairs spiritual and terrestrial" p. 36. Possible allusion to "The Modern Major General" by Gilbert and Sullivan (1879)? The final words in the ends of several lines of the G\&S song have the same form and meter: "in orders categorical", "with matters mathematical", etc.
- "Octopi" p. 49. Reference to a then-current term for monopolies, such as Standard Oil and the Southern Pacific Railway.
- "wealth of Golconda" p. 63. Golconda was the 16th-17th capital of the Indian region responsible for producing many famous diamonds, and thus the name used as a symbol of wealth.
- "Surveys Geological . . . lines chronological" p. 69. See comments re: p. 36.
- "buds the promise of celestial worth" p. 74. Line in "The Last Day" by Edward Young (1713)
- "a brave man struggling in the storms of fate" p. 76. Alexander Pope, "Prologue to Mr. Addison's Cato" (1713)
- "Hail to thee, blithe spirit" p. 90. Percy Bysshe Shelley, "To a Skylark" (1820)
- "Some are born great, some achieve greatness, and some have greatness thrust upon them." p. 92 William Shakespeare, The Twelfth Night (1602)
- "The worm, the canker, and the grief" p. 92. Lord Byron, "On This Day I Complete My Thirty-sixth Year" (1824)
- "Oh, wad some power the giftie gie us . . . " Robert Burns, "To a Louse" (1786)
- "he seems pure an' nobil ez he kin be -- but, NIXKUMAROUSE, Bill, yer kaint fule me!" reference to "Count Nixkumarouse" mentioned once in the short sketch "Back from 'Yurrup'" in "Mark Twain's Sketches" (p. 278) by Mark Twain. (1872)


## Appendix: Introduction to the Contributions to the Historical Society of Montana, Vol 2

## Prev Next Table of Contents

In 1895-1896, Sanders was the Librarian for the Historical Society of Montana. He took over the compilation, editing and publishing of the unfinished Volume 2 of Contributions to the Historical Society of Montana, due to the illness of the previous editor. The volume consisted of reminiscences, diaries, and other documents pertinent to Montana's early history.

In addition to compiling and editing many of the main documents, Sanders also wrote a few extended footnotes throughout the volume and most likely the Introduction. The Introduction doesn't have any name attached, but it was almost surely written by Sanders given his primary role in producing the volume AND the numerous overlaps (stylistic and topic-wise) with his other known writings. Several of these correspondences are detailed below. In addition, a remarkable set of parallels with a full passage in Erdnase are described separately here.
---- "dear, delightful days" ... [memories from the isolated/ended past] ----
Sanders/intro: those "DEAR, DELIGHTFUL DAYS" we recur as an era isolated from our present lives Sanders: Of other loved memories of our "DEAR DELIGHTFUL DAYS" that ended a full quarter of a century ago [CR]
---- story of a life ----
Sanders/intro: and recall with intense and affectionate interest the STORY OF THEIR LIVES from year to year. Sanders: the objective subject of this "STORY OF A LIFE" prevents... [CR]

Sanders/intro: did not know how great a DRAMA they were ENACTING; on how large a THEATRE they moved, nor how vast an AUDIENCE would be SPECTATORS of their every action
Sanders: within our borders were PLAYED the CLOSING SCENES in the DRAMA ENACTED by the contending forces of barbarism and civilization [MHS-lib]
---- interest to future historians ----
Sanders/intro: The Society is engaged in gathering the experiences of individuals and preserving them for the use of FUTURE HISTORIANS.
Sanders: it endeavors to place in the way of the FUTURE HISTORIAN a mass of important and reliable data... [MHS-lib]
---- public/future interest in narratives/stories and experiences/lives of early-dwellers/early-history, much of which is irretrievably/wholly lost ----

Sanders/intro: Give the public a coherent and connected story of the pioneer experiences of our people. Material for such a work is scanty and widely dispersed; in some instances it seems to have been wholly lost...It is apparent that public interest in the events of our early history
Sanders: and such narratives and relics as would be of future interest which deal with the lives and works of the early dwellers and travellers in this section or tend to illustrate some incident in history... Already much from our past that we should possess is irretrievably lost to us [MHS-lib]
---- terra incognita ----

Sanders/intro: and on the east by the Belt Mountain Range, and all beyond was TERRA INCOGNITA,
Sanders: the accounts and experiences of those who "blazed the trails" into this, then, TERRA INCOGNITA and founded the government upon which... [MHS-lib]
Sanders: the vast western TERRA INCOGNITA greatly increased among the Frenchman. [MHS-vol7]
---- a connected history/story/account ----
Sanders/intro: then will be evolved A CONNECTED HISTORY of Montana.
Sanders/intro: and give the public A COHERENT AND CONNECTED STORY of the pioneer experiences of our people
Sanders: publishing A CONNECTED ACCOUNT of the series of events that have taken place relative to the HISTORY of Montana
---- Montana escape from savagery ----
Sanders/intro: this CONQUEST OF MONTANA from SAVAGE life
Sanders: our TERRITORY AND STATE....the WRESTING OF this domain FROM SAVAGERY [MHS-lib]
---- sleep broken/shattered/jarred ----
Sanders/intro: has BROKEN in upon our SLEEPLESSNESS, JARRED COARSELY on our sensibilities Sanders: SLEEP IS ANNIHILATED and the midnight airs SHATTERED, your ear-drums pierced and all but BROKEN by the frightful wails of the infant. [CR bio]
---- bright/beautiful/vivid imagination/past ----
Sanders, in both the Introduction and his other writings, waxes poetic about the beautiful/vivid/bright colors of mental perceptions and stories.

Sanders/intro: In our mind's eye we have dropped the new era of to-day in the robes of dullness, and we are painting that unique past with primrose hues.
Sanders/intro: First impressions of a country and its people are generally vivid, and...the possession of pen pictures so graphic as to be of absorbing interest....We must gather the whole story
Sanders: From the bright story-land where you wander in dreams [CR poem]
Sanders: the memory retains all the freshness and brightness of coloring of the skeins [CR bio]
Sanders: ever fondly imagined that the ruddy blaze of their camp-fires at any moment might brighten into the
yellow glow of aladdin's legendary lamp. [MHS-vol7]
Sanders: like visions fair, the warp and woof of some enchanting dream. [CR poem]
---- primrose
Sanders/intro: we are painting that unique past with PRIMROSE hues
Sanders: to tread the PRIMROSE paths of dalliance and joyance. [CR bio]

## Appendix: More photos of Sanders

Prev Next Table of Contents

What follows are two photos of Sanders, over 25 years apart. The first is a photo of Sanders with his Columbia crew team (ca. 1882). The second is a photo of Sanders in 1910 during his 25th college reunion dinner. Apparently Sanders' 1918 passport described him as having a crooked little finger on his left hand. It is not evident in the 1910 photo. See also here for the crew photo with annotated heights of the various team members.


Photos from the Rare Book \& Manuscript Library, Columbia University Libraries.

## Appendix: Sanders' height (and class photo)

## Prev Next Table of Contents

How tall was Erdnase, and how tall was Sanders, and are their heights compatible? The book's illustrator, Marshall Smith, was over 6 feet tall and recalled looking down on Erdnase. He estimated Erdnase's height as 5'6, but also allowed his height as being between $5^{\prime} 5$ and $5^{\prime} 7$. Even if Smith's memory and estimates were not exact or totally accurate, we can safely assume that Erdnase was relatively short and that his height was roughly in the range described by Smith. We know that Sanders was not tall. He mentions in his diaries that he was $5^{\prime}$ when he was 14 years old. Later in life, we have the following reported heights:

- $5^{\prime} 8$ in his crew team listing (1882)
- $5^{\prime} 9$ in his class reunion bio (1910)
- $5^{\prime} 81 / 2$ in his passport (1918)

From Sanders' class photo and the reported heights of his classmates, we can form another estimate by comparing his height to four classmates who are standing on the same step as Sanders. These classmates' heights are all given in their class reunion bios:

- Englehardt is $5^{\prime} 10$
- Moldenke is $5^{\prime} 101 / 2$
- Starek is 5 ' 7 1/2
- Whitman is 6 ' 1

These heights can't all be exactly correct, since Englehardt looks to be slightly taller than Moldenke, who he is standing next to, even though Moldenke's listed height is half an inch taller. Likewise, Whitman looks to be quite a bit taller than 6'1 (assuming the other heights are correct).

Using the reported heights, we can estimate Sanders' height by comparing his height to his classmates in the class photo by using the bricks on the building as a ruler. The standard height of a brick is $21 / 4$ inches, though some can be larger. (Similar metrics could used by measuring the average distance between eyes, length of nose, etc.) If we assume the standard $21 / 4$ inch brick height, then we can estimate Sanders as being about one brick ( $21 / 4$ inches) shorter than both Englehardt and Moldenke. This makes him 5'73/4 or $5^{\prime} 81 / 4$. Likewise he appears to be about one inch taller than Starek, which would make him 5'8 $1 / 2$. If we assume roughly accurate heights for these classmates, it seems that Sanders' height was a little over $5^{\prime} 8$. On the other hand, if his classmates were exaggerating their heights, then Sanders' height would be correspondingly less.

One explanation for the inconsistencies is that men tend to inflate their heights by about an inch on average. So self-declared heights are not necessarily accurate.

As another example of inconsistent heights, on the second step we find Woolson ( $6^{\prime}$ ) and Hollis ( $5^{\prime} 10$ ), where Woolson appears to be about four inches taller than Hollis. However, the differential between Hollis's height and other classmates on
the same step (Page and Detwiller) seems consistent with their reported heights. So it appears that two of the tallest people (Whitman and Woolson) might be under-representing their heights. This is substantiated in the case of Whitman, where we learn elsewhere that Wiltsee (standing on his left) was six foot five inches tall. Whitman looks to be an inch or so shorter than Wiltsee, which would be substantially taller than the $6^{\prime} 1$ given in the class bio (assuming that Wiltsee's $6 ' 5$ height is accurate).

Note: the measurements and estimates above are all necessarily approximate. Aside from the potential error/exaggeration in reported heights, people's perceived heights can vary slightly depending on whether they're standing straight or slouched, what shoes they are wearing, etc. Also, the camera angle and distance adds additional error to estimated measurements made from the photo. For example, a view from above will tend to make people in the foreground appear to be shorter than those behind them. And on the other hand, people in the back will appear somewhat smaller due to the greater distance from the camera. We have not attempted to account for these factors other than to compare people (and/or bricks) at similar distances from the camera. It is most likely that these effects are relatively minor when comparing people standing in the same row in what appear to be relatively normal posture.

What can we conclude from this? A height of $5^{\prime} 8$ would be about an inch taller than the upper range of Smith's recollection. So that would make Sanders a little too tall to be Erdnase. However, given the substantial uncertainties involved (45 year old recollections and the difficulty of exactly estimating heights, both in real life and from photos, and from the fact that selfreported heights are frequently exaggerated), we can't conclude much other than based on height alone, Sanders could be Erdnase, even if he doesn't exactly fit into the range given by Smith.

C. H. Detwiller Columbia 1885 Collection, Avery Architectural \& Fine Arts Library, Columbia University

For reference, these appear to be the same six steps with no people.


We can also examine Sanders' crew photo to get a sense of his height. This version is labeled with heights given for the other crew members. As can be seen, Sanders is in the front row next to John Middleton, who is listed as 5'8 on the team roster (as is Sanders). It is hard to tell for sure (due to the angles etc.), but Middleton seems longer-legged and perhaps taller.


## Appendix: Sanders timeline (notes)

## Prev Next Table of Contents

The following are notes aimed at constructing a timeline of Sanders' locations and activities.
HWH = Helena Weekly Herald.
CR = Columbia 1885-1910 Reunion
DIM = Daily Inter Mountain

- July 1880. Sanders (left or arrived) Helena via Butte. Red Rock. [HWH]
- 1881 Sanders: "Calfee expected the Giant to spout today and nearly everybody in the Basin was lounging around it 'from early morn to dewy eve,' awaiting its action." [? Sanders diary]
- 1881-1885. Attends Columbia School of Mines in New York City
- July 1883. Sanders returned home by Northern Pacific Railroad to their home in this city. [Helena Weekly]
- July 1885. Sanders came NY Columbia just graduated. Will establish here with GB Lee. [HWH]
- Sept 10 1885. Charles F Lacombe [Columbia classmate] spending a few days in Helena. guest of Sanders. Soon visits mining regions and may settle in the Territory. [HWH]
- Oct 1885. Sanders came from Butte [HWH]
- August 1886. GW Wentworth [teacher and author] of Phillips Academy, Exeter visits [HWH]
- 1886. Wilbur Edgerton Sanders, M.E. '85. Bow oar of victorious ' 85 crew; now mining in Arizona. Address, Helena, Montana Territory. [handbook of the beta theta pi in the forty-eigth year of the fraternity]
- December 1886. WE Sanders who has spent the summer in the mountains prospecting, will leave to-night for Butte where he will spend the winterin the mines [HWH]
- 1886, 1887. In 1886, Sanders met him [Bemis - Columbia classmate] in the Yellowstone Park, and again in 1887 at Butte, Mont., at the meeting held there by the American Institute of Mining Engineers. [CR]
- Jan 1887. Sanders left for Butte. located there for the winter. [HWH]
- Jan 6, 1887. Helena -> Butte [HWH]
- July 1887. Sanders and WE Goodale escort mining party from Butte to Helena. [HWH]
- May 1887. Sanders started out for Boulder [Montana] with prospecting outfit. Intending to spend greater part of Summer there. [HWH]
- Sept 1886. Sanders over from Helena. [Butte Semi-Weekly Miner]
- Oct 1887. Sanders mentioned in letter by Frank Wilkeson in NY Times about finding two gold leads in Anaconda mine near Butte. [HWH]
- Jan 241889 marriage of Mr Hervey [Harvey? Henry?] Van Buren Sparks. Mr Wilbur Sanders of Montana was the best man. [New York Times]
- Feb 1889 Sanders best-man at marriage of Henry Van Buren Sparks and Miss Henrietta Whitehurst Pinkney, which was celebrated at St Charles Borromeo's church on the 23dinst. The groom was a class mate of Mr Sanders, who went to New York especially to officiate as his best man. [HWH]
- Aug 1889. Sanders accepted position of superindendent of East Pacific Mine at Placer [Helena Independent]
- From 1889-1891 Helena MT city directories, we know that he boarded at 328 N. Ewing, and listed his occupation as "mining engineer". [Genii Forum]
- May 1891. Sanders accompanied father from Washington to Helena. [Helena Independent]
- 1891: Northern Pacific v. Sanders, 46 Fed. Rep. 239, 249 (D. Mont. 1891).
- Jan 4 1892. Sanders in town on a few days visit from Philipsburg. Col Sanders mentioned next. typo? [Helena Independent]
- Spring 1893. Wilbur E Sanders, Columbia '85, son of the ex-Senator of Montana, is plying his vocation as mining engineer in Montana, and is meeting with good success. He spent several weeks in New York in the Spring. [The Beta

Theta Pi, volume 21]

- 1893. Mine supt, Ewing and Seventh Avenue, Helena Mont. [School of Mines Quarterly Nov 1892 - July 1893]
- Nov 6th, 1895. Assumed duties of Librarian of Montana Historical Society.
- [???] March 15 1897. Bessie Bon, an unfortunate woman, who shot herself in the Auburn rooming house at 1301 Grand avenue, April 11, 1896 because WE Sanders had spurned her, borrowed his revolver for he purposes of ending her career. She lived 24 hours. The revolver, which was a 38 caliber, had a pearl handle with a dove carved on it. It was not returned to Sanders. [Kansas City Journal] [?? same WE Sanders]
- April 1897 "Wilbur Sanders is visiting friends in Bozeman for a short time." (WES or WFS?) [Helena Independent]
- May 1897 - Sanders convicted of stealing ore "The jury returned a verdict of guilty against W. E. Sanders, charged with grand larceny, the theft of ore from the Trade Dollar mine." "Ore Thief Convicted" [Boise [ID] Statesman Date: 05-28-1897; Page: [1]]
- [1898] studied at the School of Mines, Columbia College (now Columbia University), graduating as a mining engineer in 1885. With the view of obtaining practical experience, he then spent several years in the mines of Butte, Mont., and in general milling, amalgamating, concentrating and smelting practice. He also prospected for several seasons in the mountains of Montana. Mr. Sanders has filled various positions with mining companies in the West, and has managed several properties in that section, and in the zinc regions of Missouri. Mr. Sanders has reported on many mines through out the West, and is engaged at present as a consulting mining engineer, with headquarters at Butte, Mont. For the present volume he has contributed the article on "Mine Timbering." [blurb from Mineral Industry 1899]
- Feb 1899. Sanders handed in resignation to Montana Alumni Association "some time ago" because business called him to another state.
- 1899. Published article on Mine Timbering in The Mineral Industry, 1899, vol. 8, Described as being consulting mining engineer, located in Butte.
- Aug 25 1899: arrivals at the Grand. WE Sanders, Helena [Billings Gazette]
- Sept 21 1898. at the hotels. Ryan (hotel): W.E. Sanders, New York. [Saint Paul Globe]
- 1899. Joplin Missouri. In this wise did Sanders meet Hollis at Joplin, Mo., where the latter was engaged on some mine examinations within the zinc fields, in 1899 [CR]
- Sept 1899 Sanders spent much time of past year in Missouri (zinc mines). will go with engineers to San Francisco. was visiting Anaconda.
- Feb 15,1900 . warrant charging Louis James with the theft of a valise and contents belonging to WE Sanders. The valise is alleged to have been taken from the Workingmen's Mission in South Main Street. [DIM. Butte Montana] [?? Same WE Sanders ??]
- Sept 14 1900. John Perkins [Berkin], the well known mining man of Boulder [Montana] and WE Sanders are in the city. [DIM]
- Sept 14, 1900. Sanders/Berkin (from Boulder) at Butte Hotel. [DIM, Butte]
- Nov 3 1900. Sanders and Berkin (of Boulder) bought options on Boss Tweed, Clipper, Belle Charity and Eclipse gold mines at Pony. [Butte DIM]
- 1900 Contributors: Sanders, Wilbur E., studied at the School of Mines, Columbia College (now Columbia University), graduating as a mining engineer in 1885 With the view of obtaining practical experience, he then spent several years in the mines of Butte, Mont., and in general milling, amalgamating, concentrating and smelting practie. He also prospected for several seasons in the mountains of Montana. Mr Sanders has filled various positions with the mining companies in the West, and has managed several properties in that section, and in the zinc regions of Missouri. Mr. Sanders has reportd on many mines throughout the West, and is engaged at present as a consulting mining engineer, with headquarters at Butte, Mont. For the present volume he has contributed hte article on "Mine Timbering." [The Mineral Industry, Its Statistics, Technology and Trade]
- June 71901 - A deal of importance is close at hand...John Berkin just returned from Skagway, arrived, accompanied by WE Sanders, and another gentleman. [Butte Inter Mountain]
- 1901-08-03: Patent application US7081701A filed by John Berkin, Wilbur E Sanders
- 11-10-1901. "Wilbur E. Sanders, of Butte, Mont., was in the city yesterday. He is preparing a text book on mine timbering." [Duluth [MN] News-Tribune, published as The Sunday News Tribune, Volume: 23; Page: 5;]
- April 18, 1902: Wilbur E Sanders, a mining expert, from Helena, came on the stage Wednesday and was the guest of Chris Wilke that evening. He is making an examination of the mines in the Steele creek hills. [Big Hole Breezes]
- 1902. Published article: Mine Timbering and the Support of Earthworks by Wilbur Edgerton Sanders... Sanders, Wilbur E., was graduated from Columbia College School of Mines, as mining engineer in 1885, and following graduation spent several years working in every manual capacity in various mines, mills and metallurgical establishments of the West, to gain practical experience. As examining engineer Mr. Sanders has travelled over and examined a large part of the metalliferous region of the West, and has both superintended and operated properties in Idaho, South Dakota, Washington, British Columbia, Colorado and Montana; in the latter State he was in charge of the exploiting of the noted East Pacific mines. His latest connection, that of geologist to the Amalgamated Copper Co of Butte, Mont, he resigned, recently, to devote himself to his forthcoming work on "Mine Timbering and the Support of Earthworks." His contributions to the present volume of the mineral industry is a preliminary paper on this subject. [The Mineral Industry to the end of 1901 - edited by Joseph Struthers, PhD] [Struthers was a classmate of Sanders at Columbia and attended the 1910 reunion]
- 1902 WE Sanders is superindendent of the Snow Creek mine, Baker County, Oregon, which was sold last may to New York parties for $\$ 75,000$. Snow Creek mine- the location of this group is about a mile from the Psyche. It is located on a gulch that ...It comprises four claims which were purchased last May by New York parties of WE Sanders who had a bond and a lease thereon. The price paid was $\$ 75,000 \ldots$ Arthur B Brown and Fred Smith of Sumpter are directing the work as consulting engineers, WE Sanders being superintendent. [Mining American, vol 46]
- June 18 1902. action-- Chloride Con Gold Mining Co vs WE Sanders MT of note 200 [sumpter miner]
- The 1902 Butte MT city directory has him living at 534 West Galena as a boarder, and working as a mining engineer for the ACM Company at 508 Hennessy building. [Genii Forum]
- Friday, November 7, 1902. Wilbur E Sanders, manager of the Bonanza mines, returned from Butte Sunday, after twoweek absence. He caught cold in Butte after going out and had to to over to Helena to recuperate. [Bug Hole Breezes (Jackson, Mont). Wisdom, Montana]
- Sat jan 17, 1903. Wilbur E Sanders in town on route to Big Hole. start fortnight visit to Old Mexico in a few days. [Butte Inter Mountain]
- Jan 18 1903. manager Wilbur E. Sanders came from Helena last week to look after affairs at Bonanza, returning to the city Sunday. Mr. Sanders has about recovered from his recent illness. [the Dillon Examiner]
- Jan 24 1903. Sanders left Butte for Monterey, Mexico where he will visit Mr P.A.L. Mannheim [Columbia classmate]
- April 25,1903 . WE Sanders here from Wisdom for 10 days.
- May 13 1903, page 16. "Pulaski Company Elects Officers...W.E. Sanders, mining expert.... Mr Sanders, who is to have active charge of the work of developing the mine, is well known as a mining expert upon whose judgment it is safe to rely. It was he who was largely instrumental in bringing the Snow Creek and Phoenix to their present standing. He and Mr Rosenthal were the original owners of the Pulaski..." Followed by Ad for Pulaski Gold Mining and Milling Company stock shares. "W.W. Sanders, who is General Manager, is to have charge of the work and will give it his personal supervision. His record in Eastern Oregon is the development of the well known Phoenix and Snow Creek mines which, under his management, became producers. He says "with the present showing and amount of work done

I consider the Pulaski group fully equal to any property i have ever had anything to do with.... Board of Directors: ... W.E. Sanders, vice presidenbt and general manager.." [Sumpter Miner (Oregon)]

- July 15 1903. Colonel Topping and W.E. Sanders Secure Property...The Oriole, near Susanville was bonded this week to Colonel E.S. Topping and W.W. Sanders. [Sumpter Miner]
- Sept 9 1903. Colonel E.S. Topping and W. E. Sanders left yesterday on a mining trip to Spanis Gulch. [Sumpter Miner]
- 1904. Published artile: The Framing Of Rectangular Shaft Sets in Engineering and Mining Journal Vol 77
- Nov 11 1904. WE Sanders, manager of the Mogolon Gold and Copper company at Cooney, spent a few days in Silver City [Las Vegas Daily Optic]
- Sept 1905. Sanders leaves Bisbee for Butte, Mont. [Bisbee Daily Review]
- 1906. Helena. Published letter: "Best Shape for a Shaft"
- Feb 1906 (Bethlehem Meeting). Published article: A Reference-Scheme for Mine-Workings. by Wilbur E. Sanders, E. M, Helena Mont. [Transactions of the American Institute of Mining Engineers]
- 1906. Wilbur E. Sanders of Helena Mont., is investigating mines in Washington and British Columbia. [Engineering and Mining Journal - Volume 81 - Page 1060]
- 1906. Wilbur E. Sanders has returned to Helena, Mont., from Alaska [Mining and Scientific Press - Volume 93 - Page 562]
- [???] Oct 1906. Wilbur Sanders of Denver, Col is visiting the city for a few days. [Richmond (Indiana) Palladium] [?? same Wilbur Sanders]
- 1907. Published (editor) book Mine Timbering.
- Jan 19 1907. Wilbur E. Sanders, mining engineer, of Helena Mont., is engaged on professinal work in the Greenwater district, California [The Engineering and Mining Journal]
- Jan 28 1907. Copper strike Montana rep by WE Sanders [Los Angeles Herald.]
- Feb 2, 1907. Personal: Wilbur E Sanders recently examined some prospects in the greenwater district, california [Mining and Scientific Press]
- April 6 1907. Personal: Wilbur E. Sanders, of Butte, Mont., is visiting in New York [The Engineering and Mining Journal]
- April 20 1907. Personal: Wilbur E. Sanders, of Butte, has been on a visit to New York [Mining and Scientific Press]
- 1907: The third dinner was held at the New York Athletic Club, on April 5, 1907. The following members were present: Detwiller, Dwight, Graff, Lacombe, Mannheim, Moldenke, Norris, Sanders, Titus, Struthers and Woolson.
- Aug 10 1907. WE Sanders arrived from Los Angeles last saturday to look after his mining interests in the goldfield district. [Goldfield News. Goldfield Nev.]
- Aug 1907. Sanders did a copper mine deal [Tonopah Bonanza]
- Dec 17 1907. WE Sanders of Los Angeles arrived here yesterday. [Tonopah Daily Bonanza]
- 1907 Professional Directory: Sanders, Wilbur E, Mining Engineer. Helena Montana. [Mining and Scientific Press Volume 94]
- [The Caledonian. April 1908. Refers to dinner May 14 (1907?) and S.W. Erdnose] [could this be Sanders?]
- 1909. Sanders, Wilbur E., Min. Engr., 709 Union Trust Bldg., Los Angeles, Cal [Bulletin of the American Institute of Mining Engineers - Page 93]
- Sept 1909. Obit for Harriet Peck Sanders [mother]. Wilbur lived in Los Angeles. [Anaconda Standard]
- 1909. He prepared much of the manuscript for Volume II of the Contributions 1896 and had charge of the publication of that volume from page 14- to its completion....this article was first written during 1905 but re-written and brought to its present more extended form during the year 1909. -Ed. [contributions Montana Historical Society Vol 7 1910]
- May 31st 1910. Sanders in NYC photo of reunion dinner astor hotel. [Columbia School of Mines 25th Reunion Class of 1885]
- June 1910. Wilbur E Sanders... contributes to the archives of the Montana Historical society a letter written by... [Lake Shore Sentinel]
- Sept 17, 1910. Wilbur E Sanders is visiting New York. [Engineering and Mining Journal]
- 1910. Sanders marries Henrietta.
- Oct 281911 issue of Mining and Engineering World says "Wilbur Edgerton Sanders of Los Angeles returned from an eastern trip last week." [genii forum]
- Mining and Engineering World 1911 • Mineral industries
- 1912 Sanders, Wilbur E, Cons Min Engr. 825 E Colorado St., Pasadena, Cal. [Year Book - Page 93 American Institute of Mining Engineers 1912]
- July 1913. Published Letter Wilbur E. Sanders Sonora, California, July 6. [Mining and Scientific Press - Volume 107 - Page 233. 1913]
- Oct 25, 1913. Mrs WE Sanders, wife of the superintendent of the Alkali mines company arrived here by Monday's train from Sonora, California, to join her husband. [Eureka Sentinal (Eureka Nev)]
- Aug 8 1914. WE Sanders superindendent of the Alkali Mines company was a departure for California by Tuesday's train. [Eureka Sentinal (Eureka Nev)] [different WE Sanders?]
- Feb 14 1914. Kennan C Herrick, son of Mrs WE Sanders, was an arrival by Friday's train from San Francisco for a visit with his mother at the Alkali Mines plant. [Eureka Sentinal (Eureka Nev)]
- April 1914. Sanders, Wilbur E., Cons Min. Engr Alkali Mines Co Eureka Nev. '85 [graduation year?] [american institute of mining engineers year book]
- 1916. Alkali Mines Co. Office: 1417 First National Bank Bldg., Chicago Ill. Mine address: Eureka, County, Nev. W.E. Sanders, supt. [The Mines Handbook]
- 1916. Published article: Improved Type of Ore Bin. In Details of Practical Mining. Compiled from Engineering and Mining Journal.
- 1916. Wilbur Edgerton Sanders, E.M. 85. (Soulsbyville, Cal.) [Catalog of Officers and Graduates of Columbia University, XVI addition]
- Feb 9 1916. Returns to camp. W.E. Sanders returned to copper basin district yesterday after business trip to the city, and starts development on his properties in the Skull Valley range at once. [Arizona. Weekly Journal-Miner, Wednesday morning. Page six]
- 1930 Census: Age 64, married for 20 years to Henrietta C. Sanders; occupation Mining Engineer, resides at 2909 Regent St. Berkeley CA
- 1935. Obituary: "Sanders left Butte 14 years ago to establish a home in Berkeley Calif. where he many mining connections. Prior to his death he had been supervising work in mines on the "Mother Lode." [Montana Butte Standard.]

Note: The following is a list of references to what appears to be a different W.E. Sanders

- [???] Sept 8 1897. Visitors at the Yard with Stock. WE Sanders and Gunther Bros. Woodward, O.T., had in cattle yesterday. [Kansas City Journal] [? different we sanders]
- [???] November 26, 1899. Decrees of divorce granted in case of Elizabeth Sanders against W.E. Sanders. [The Anaconda standard] Elsewhere it says against "William J Sanders". So a typo in the previous. [DIM, sept 14 1899]
- [???] March 1903. A gun play was made in the barroom of the Butte City hotel, at Arizona and Park streets, shortly after 4 o'clock this morning. According to the story told to Deputy County Coleman this morning, Japes La Porto was the man behind the gun, and W.E. Sanders, the man who faced the muzzle of the weapon. Sanders, who related the story, says that he succeeded La Porto as bartender at the place a few days ago. Since then, he asserts La Porto has made threats of "getting even." He stated that he paid no attention to these threats, and nothing developed until shortly after 4 o'clock this morning. At that time La Porto entered the saloon and ordered a glass of beer. As he was drinking it he began abusing Sanders and followed this up by drawing a revolver and threatening to bore a hole in the latter. Sanders summoned the police, and La Porto was locked up in the city jail this forenoon. The prisoner denies that he had any intention of injuring Sanders, and that he only intended to frighten him. [Butte Inter Mountain]
- [???] Oct 1903. Transfer of property: W.E. Sanders and wife to M.J MULLETT lots... [WIFE!! different WE Sanders?] [Sumpter Miner]
- [???] Oct28 1903. William Sanders --- Ed Hauser, William Sanders and Albert Weiss returned yesterday...regarding which mention was made a few days ago in connection with a good strike...valuable with the proper development [Sumpter Miner] [Is William a typo or name sometimes used by WE Sanders? He does call himself "Billy" and "Willy"]
- [???] Nov 11, 1904. W.E. Sanders, manager of the Mogollon Gold and Copper company at Cooney, spent a few days in Silver City. [Las Vegas Daily Optic]
- [???] Mar 10 1908. WE Sanders of the Idaho Mercantile Company made a business trip to Spokane today. [Coeur D'Alene Evening Press] [?? different WE Sanders]


## Appendix: Sanders self description

## Prev Table of Contents

## From Columbia School of Mines Twenty-fifth Anniversary Reunion, 1885-1910

It sufficeth to say that only the innate and in(co)herent modesty of the objective subject of this "story of a life" prevents the Class Historian (officially - when writing of Billy Sanders) from dealing in higher superlatives than these hereinafter detailed, specified and contained, to wit: lie air young an' beautifullest an' fair; he hez carroty face an' a freckled hair; he seems pure an' nobil ez he kin be-but, nixkumarouse, Bill, yer kaint fule me! He hez wondrous grace in hiz nether pegs, when he pir-hoo-etts on hiz rear hind legs: an' he thinks he's sum with hiz hulla- balloo; but he kaint fule me- know him throo an' throo! He hez tears in hiz eyes when he talks uv him; what he sez uv him, sure it ain't so slim; but 1 sez ter him, with hiz reinekaboo, naow yer kaint fule me- so yer jess gaow tew! An' ter h'ar him talk uv ther pace he's set; an' uv what he's done, fer he's braggin' yet; what a bad man he, an' so Woolly! Gee! - but I know yer, Bill, an' yer kaint fule me!

Wilbur Edgerton Sanders was born at Akron, Ohio, Aug. 21, 1861. His early life was spent at Virginia City and Helena, Mont. In 1881 he entered the School of Mines and was graduated with the Class of '85 as an Engineer of Mines. Shortly after graduation he began work under ground in the mines of Butte. Later some seasons were spent at prospecting, and while thus retired from active mining work he served as clerk on the Committee on Enrolled Bills of the U. S. Senate at Washington, D. C, and as Librarian of the Historical Society of Montana.

In various minor capacities he has been identified with diverse and extensive mining affairs throughout the Western United States, British Columbia, Alaska, and Mexico. As Superintendent or Manager of Mines he has had charge of important operations in Montana, Nevada, California, New Mexico, Kansas, Missouri, and other States. As Consulting Engineer he has been connected with mining litigation between various mining interests in Montana and California, and with mine examinations in Alaska and in Mexico, in British Columbia, and throughout the western mining field of the United States. During the last year and a half he has been identified, as Consulting Engineer and Vice-President, with the Engineers' Exploration Co., Ltd., of Los Angeles, Cal., in connection with extensive irrigation interests of that company in Mexico, and at the present time is the Superintendent of the Fairview Fluorspar and Lead Co., of Fairview Landing, Illinois.

He has written for "Transactions, American Institute of Mining En gineers," "Mineral Industry," "Engineering and Mining Journal," "Mining and Scientific Press," also for the Historical Society of Montana. His article on "Mine Timbering" has, with similar ones, been published in book form by the Hill Publishing Co.

He is a member of the Alumni Association of the Schools of Science, Columbia University, the American Institute of Mining Engineers, the Montana Society of Engineers, the American Geographical Society, and the U.S. Forestry Association. His height is 5 ft . 9 in ., present weight 160 lb . He still retains his scalp-lock, while the cutaneous excrescence is carefully eradicated from his face. He is not married, but 'as 'opes.

Return to Top


[^0]:    **** ---- CURRICULUM: constant study, observation, and practical experience ----

[^1]:    ---- used/employed in connection with ----

