

tains the advantages of all others. Each has special advantages in special cases. Whatever figure alphabet, however, is used, the main thing about it is to master it thoroughly.

(2) Cases where a significant or analytic word or phrase expresses the date or number. "Ill-usage" expresses the date of the death of Columbus in 1506, as he died in great neglect. The impetuous pupil says: "How can I be sure that this phrase applies to Columbus? Would it not apply to any one who had been ill-used?" Certainly not. It applies only to an ill-used man whose date (birth or death, &c.) was in 1506. If he knows of some other man who was greatly ill-used and who died in 1506, then he must use another analytic phrase for that man. See next paragraph.

Six distinguished persons were born in 1809, yet the date of the birth of each is easily fixed: Darwin, whose principal work was called "Origin of Species;" Gladstone, noted for his vigorous eloquence; Lincoln, who was conspicuous as a binder together of separated States; Tennyson, who was chosen as Poet-Laureate, and who was born at Somersby, England; Felix Mendelssohn-Bartholdy, who early displayed a musical genius, and whose first oratorio was called "St. Paul;" Elizabeth Barrett Browning [*née* Elizabeth Barrett], whose poems are distinguished for their subjectivity. The analytic formulas for these different persons born in the same year, 1809, may each differ from the others, thus:

Birth of Charles Darwin.....Species (18)09  
 —William Ewart Gladstone.....Spellbinder (18)09  
 —Abraham Lincoln.....Splicer (18)09  
 —Alfred Tennyson, Poet (18)09 or (0) Selected  
     (9) Poet or Somersby (09)  
 —Felix Mendelssohn-Bartholdy (18)09 or Precocious  
     (18)09, or (0) St. (9) Paul  
 —Elizabeth Barret Browning (18)09, or Subjective  
     (18)09

1. Do all pupils succeed in finding analytic date or number words without any previous training in In., Ex., or Con.? 2. What proportion succeeded? 3. Does this not confirm the rule? 4. Do these failures ever become successes? 5. How? 6. What must be carefully studied hereafter? 7. After studying my formulas, what should the pupil do? 8. What will be the result, if the pupil acts on my advice? 9. In what ways may the different processes for dealing with dates and numbers be classified?

Benjamin Franklin was born in 1706, and died in 1790. (0) "Sagacious (6) "child" would analytically fix his birth, as he was known as a precocious boy: or the single word (06) Sage. As he was a great worker all his life, (90) "Busy," or "(9) Benjamin (0) Ceased" would significantly express his death-date.

(3) Cases where the initial consonants of a short sentence analytically express the date.

The analytic number words, phrases, and sentences which one retains most easily are those which he has made himself. Formulas prepared by others are perfectly retained, however, if they are thoroughly assimilated.

The analytic word or phrase is what one most usually finds and uses. Sentences will sometimes be useful because they may contain the name of the event, and they sometimes offer a wider range for selection of the needed consonants; but care must be taken to avoid ambiguity. To indicate the birth of Lincoln, we might use this formula: (1) Dawn (8) of (0) Assassinated (9) President, but as Garfield was also assassinated, the formula in its meaning would equally apply to the latter. If, however, we know that Garfield was born in 1831, the ambiguity would be removed. (1) Dawn (8) of (0) Assassinated (9) Abraham could apply only to Lincoln. (1) Dawn (8) of (0) Slavery's (9) President would be applicable to the career of Buchanan, Pierce and Fillmore, but it would express the birth-date only of Lincoln, while it would be wholly inapplicable to his career. (1) Dawn (8) of (0) Slavery's (9) Punisher would exclusively apply to Lincoln's life and birth-date.

(2) "Noah a (34) Mere (8) Waif," (2) "Noah (3) May (48) Rove," or (2) "Noah (3) May (48) Arrive," are analytic sentences where all the sounded consonants are used. But a greater variety of sentences might be found, or one sentence be more readily found in the first instance if only the initial consonants are used: as, (2) Noah's (3) Menagerie (4) Ark (8) Full, or (2) Noah (3) Made (4) Ararat

1. Can you think of any other analytic words to express the date of the birth of Abraham Lincoln? 2. Since "h" has no figure value, could we not use "Shaper"? 3. If not, why? 4. What analytic number, word, phrase, or sentence, does the pupil retain best? 5. Are formulas made by others ever perfectly retained? 6. In what cases?

(8) Famous, or (2) Noah's (3) Marvellous (4) Rainy (8) Flood, or (2) Noah's (3) Mighty (4) Ark (8) Floated, or (2) Noah (3) Mounted (4) Ararat (8) Firmly. Other specific analytic phrases for this event may easily be found by the student.

The superiority of analytic phrases where *all* the sounded consonants are used, over the analytic sentences, where only the initial consonants are employed, may be seen in the case of the number of men who enlisted in behalf of the Federal Government in the late war. The number was *two millions, three hundred and twenty thousand, eight hundred and fifty-four*. By initial consonants we have, (2) Any (3) Man (2) now (0) is (8) a full (5) loyal (4) Hero. By all the sounded consonants we have—"Inhuman Civil War;" the latter shorter, more significant, and more easily remembered. And, on the principle that a condensed, brief statement, if clear and definite, makes a more vivid impression than a longer one, we shall find that a short analytic phrase is better for the memory than an analytic sentence, and an analytic single word than a phrase. But a short analytic phrase, or a short analytic sentence, is usually necessary, owing to our ignorance of the subject matter, the limitations which belong to all figure alphabets, and our neglect to act strictly on the lines of In., Ex., and Con.

(4) *Cases where there is no direct relation between the person, fact, or event, and the date, or number word or words.* In such cases, Synthesis, which is taught hereafter, develops an *indirect* relation. Synthesis is used in three cases: (1) Where there is no relation *existing* between the fact or event and its date word; (2) Where *we are ignorant* of all the facts which would give us significant or analytic date-words; and (3) where we know the needful pertinent facts with which analytic words could be formed, but we cannot

1. Is the analytic word or phrase self-connected to the event? 2. Why will sentences sometimes be useful? 3. What must be avoided? 4. Can a greater variety of sentences be found if only the initial consonants are used? 5. What does the phrase "Inhuman Civil War" represent? 6. What does it show the superiority of? 7. What are the characteristics which recommend it? 8. Is a short analytic phrase better for the memory than an analytic sentence? 9. On what principle?

recall them for use. In these three cases Synthesis must be used. I will now give and illustrate the rules for the prompt finding of *analytic date or number words*.

The *preparation* for thus remembering numbers without effort is the only exertion required. When the method is mastered, the *application* of it is made with the greatest ease and pleasure.

There are four indispensable requisites to finding analytic date and number words promptly.

(1) SUCH A MASTERY OF THE FIGURE ALPHABET THAT THE CONSONANT EQUIVALENTS OF THE CIPHER AND NINE DIGITS ARE AT INSTANT COMMAND, AND NEVER HAVE TO BE LOOKED UP WHEN YOU HAVE TO DEAL WITH FIGURES.

Pumps were invented in 1425. A student who thinks 2 is to be translated by "m" instead of "n," translates the dates by these phrases, *viz.*, "Drum a whale," or "Trim oil," or "To ram a wall." As these phrases sustain the relation neither of In., Ex., or Con. to the fact, they are hard to be remembered; and if remembered, they mislead. The student who has mastered the Fig. Alphabet remembers that "n" stands for 2, and if he knows the object of pumps, he at once finds the analytic phrase, "Drain a well." The formula would be: "The pump invented—*Drain a well* (1425)," or (1) Water (4) raised (2) in a (5) hollow. How could he forget the date?

Tea was first used in Europe in 1601. The unobserving student imagines that 6 is translated by  $g^{hard}$ , k,  $c^{hard}$ , q, or ng, and so he translates 1601 into "Outcast" (1701); a mistake of 100 years, and, besides, "Outcast" is wholly unconnected with the introduction of tea into Europe. The genuine student knows that 6 is represented by sh, j, ch, or  $g^{soft}$ , and so he at once finds the analytic formula: "Tea first introduced into Europe—*Tea chest* (1601)." The figure phrase bears the relation of In. and Con. to the event, and cannot be forgotten. Besides many people

1. What is sometimes necessary? 2. In how many cases is Synthesis used? 3. What are they? 4. How many indispensable requisites are there to finding analytic date and number words promptly? 5. Is draining a well the sole object of a pump? 6. Was such its purpose originally? 7. Explain the two phrases used to fix the date of the introduction of tea into Europe. 8. Can a figure phrase that bears the relation of In., Ex., or Con. to the event be forgotten?

believe that tea **helps** digestion, and such persons would find an analytic date-word thus: "Tea first used in Europe — *Digest* (1601)."

"C<sup>soft</sup>" is often mistaken for "c<sup>hard</sup>" by careless learners. Fulton's steamboat "Clermont" was launched in 1807. Such a pupil translates that date by the phrase, "Defies ice" (1800). Here "c" is soft and represents a cipher and not 7. "Defy a scow" gives the exact date. Here the "c" is hard and represents 7, and as the steamboat could easily outrun the "scow," the phrase is easily remembered.

An impatient pupil who never learns anything thoroughly often disregards the rule about *silent* consonants. Braddock and most of his men were killed by the Indians in 1755. This date this pupil translates by the phrase, "Dock knell all" (17255). He overlooks the fact that 17 was expressed by "Dock," and no one out of a mad-house can tell how he came to add "knell all," unless he had forgotten that he had provided for the 7 of 17, and imagined that "k" in knell is sounded. But how account for "n" to introduce 2? A genuine pupil would find the analytic phrase in "They kill all" [1755].

Andrew Jackson, the seventh President, died in 1845. The unindustrious pupil imagines that "p" represents 8, and not "f" or "v," and translates 1845 into "To pour oil" (1945). The diligent student finds an analytic translation of the date in the phrase "The farewell" (1845).

These illustrations are sufficient to convince any one that the Figure Alphabet must be mastered before the attempt is made to deal with dates and numbers.

(2) THE PUPIL MUST POSSESS SUCH A MASTERY OF THE SUBJECT MATTER THAT HE CAN INSTANTLY RECALL FACTS RELATING THERETO ON THE LINES OF IN., EX., AND CON. If he lacks such knowledge he had better deal

1. What mistake does the impatient pupil make? 2. Does this not convince you that the figure alphabet must be mastered before the attempt is made to deal with dates? 3. What is the second requisite to becoming proficient in forming analytic date words? 4. What should the pupil do if he lacks the knowledge indicated here? 5. If the pupil fixes in mind the population of three States per day, how long will it take him to learn the population of all the American States? 6. How long to deal in like manner with the population of all the countries of the globe?

with dates and numbers which he must remember by synthesis [hereafter], or by Numeric Thinking, rather than strive in vain to find *analytic* date and number words.

It is said that there are 1,750 spoken languages. If the pupil does not know that the tongue is moved in different ways to pronounce the distinctive sounds of different languages, he might not think of this analytic translation of (1750), "Tongue all ways."

The population of Kentucky according to the last census (1880) was 1,648,690. Those who do not know the Kentuckians raise fine saddle and race horses, many of which are bays, might not think of the analytic phrases, "Teacher of showy bays," or "Teacher of a showy pace."

The estimated number of horses in the world is 58,576,322. Those who do not know how cruelly coachmen often treat the horses under their charge might not think of the analytic phrase, "Will feel coachmen now."

The Yellowstone National Park contains 2,294,740 acres. One who does not know that this park was recently created, might not think of the analytic phrase, "One New Park arose."

The U. S. Government paid out in the year 1865 the sum of \$1,297,555,324. If one wished to remember the exact figures, he could easily find an analytic phrase, if he thinks of the act of delivering or handing over the money, as "They unpack loyally all money here." If any analytic phrase is long or awkwardly constructed, it is very easy to memorise it by the analytic-synthetic method; as (1) They unpack. (2) They unpack money. (3) They unpack money here. (4) They unpack all money here. (5) They unpack loyally all money here.

The number of letters delivered in Great Britain during the postal year of 1881-82 was 1,280,636,200. If the student knows that the Central Post Office of London is a very large building, he could instantly find the analytic phrase, "Within office huge much news we see."

The amount lost annually by fire in the United States is estimated at \$112,853,784. If we do not go outside of the subject matter of losses by fire, we shall readily find an analytic phrase by means of which we can certainly

remember that large number of dollars—"A debt on flaming fire."

There are 653,020 Freemasons in U. S. A. Those who know what is meant by the phrase, "From labor to refreshment," in the masonic ritual, will at once translate those figures into the analytic phrase, "Jolly Masons."

There are 591,800 Odd Fellows in the United States. Notice if you can find figures to translate "Odd" or "Fellows," or any other fact pertaining to the Order, and you have the analytic phrase, "All happy 'Odd' faces."

There have been granted 428,212 patents in the United States. Can you find any word pertaining to patents in those figures? "We here invent anew."

The number of Indians in the United States is estimated as 241,329. Considering how unkindly treated many of them have been, we find an analytic phrase which fits the fact—"No red man happy."

The population of the state of New York in 1880 was five millions, eighty-two thousand, eight hundred and seventy-one (5,082,871). An analytic phrase founded on any conspicuous characteristic of the population, or on any prominent aspect of the geography of the State [Niagara Falls, for instance], which many of its people have witnessed, would suffice, or "A (5) Legal (0) Census (8) Of (2) New-York's (8) Folks (7) Comprising (1) Eighty's."

The pupil who conscientiously studies the rules and examples in this lesson will find that he can have the great satisfaction of always being exact and reliable in regard to numbers.

1. Give an original analytic phrase expressing the number of acres in Yellowstone National Park. 2. Why do we not give all three of the 1's in the word "loyally" a figure value? 3. In translating the word "debt," why is it not 101 instead of 11? 4. What makes these phrases easy to remember? 5. Give an analytic phrase expressing the number of patents granted in the United States. 6. What great satisfaction can the conscientious pupil always have? 7. Suppose, when the pupil reaches this page, he has learned that the number of the population, or of patents, or of Masons, Odd Fellows, &c., has changed, what is he to do? 8. Must he not deal with the latest statement of the fact, and find his own analytic number words?

## DATES OF THE ACCESSION OF THE AMERICAN PRESIDENTS.

The date-words opposite each name can be learned by one careful analytic perusal. If the relation is not understood in any case, a glance at the explanations which follow the series of Presidents will remove all doubt or difficulty.

*GEORGE WASHINGTON . . . . .	<i>Fabian</i> (1789).
JOHN ADAMS . . . . .	<i>Bickerings</i> (1797).
*THOMAS JEFFERSON . . . . .	<i>Steed</i> (1801).
*JAMES MADISON . . . . .	<i>Speculative</i> (1809).
*JAMES MONROE . . . . .	<i>Doctrine</i> (1817).
JOHN Q. ADAMS . . . . .	<i>Unlucky</i> (1825).
*ANDREW JACKSON . . . . .	<i>Unwhipped</i> (1829).
MARTIN VAN BUREN . . . . .	<i>Mocked</i> (1837).
†WILLIAM HENRY HARRISON . . . . .	<i>Hard cider</i> (1841).
JOHN TYLER . . . . .	<i>Rudderless</i> (1841).
JAMES K. POLK . . . . .	<i>Realm-extender</i> (1845).
†ZACHARY TAYLOR . . . . .	<i>Warproof</i> (1849).
MILLARD FILLMORE . . . . .	<i>Licenser</i> (1850).
FRANKLIN PIERCE . . . . .	<i>Looming</i> (1853).
JAMES BUCHANAN . . . . .	<i>Lecompton</i> (1857).
*ABRAHAM LINCOLN . . . . .	<i>Agitation</i> (1861).
ANDREW JOHNSON . . . . .	<i>Shall</i> (1865).
*ULYSSES S. GRANT . . . . .	<i>Chapultepec</i> (1869).
RUTHERFORD B. HAYES . . . . .	<i>Cocoa</i> (1877).
†JAMES A. GARFIELD . . . . .	<i>Fatal</i> (1881).
CHESTER A. ARTHUR . . . . .	<i>After</i> (1881).
GROVER CLEVELAND . . . . .	<i>Flood</i> (1885).
BENJAMIN HARRISON . . . . .	<i>Fibrous</i> (1889).
GROVER CLEVELAND . . . . .	<i>Boom</i> (1893).

1. How can the date-words opposite each name be learned? 2. What must be done in case the relation is not understood? 3. What is the relation between William Henry Harrison and "Hard cider"? 4. Why would not "Sweet cider" do? 5. What Presidents served more than one term? 6. How is this indicated? 7. How many died in office? 8. When is the pupil supposed to learn the series of Presidents?

\* Those who were in office more than four years were re-elected for a second term. The second term always began four years after the beginning of the first term.

† Those who were Presidents for less than four years died in office and were succeeded by Vice-Presidents. President Lincoln was murdered forty days after the commencement of his second term of office, when Vice-President Johnson became the 17th President.

REMARKS.—The pupil is presumed to have learned heretofore the series of Presidents from Washington to Grover Cleveland, and to have recited it forwards and backwards many times. Now let him learn the dates of their accession to office, and then let him recite the series both ways in connection with those dates several times: as, George Washington, 1789; John Adams, 1797; Thomas Jefferson, 1801, &c., &c., to Grover Cleveland, 1893 and then back to Washington. Although it is much better for the pupil to find his own analytic date-words, yet, as many may not have the time to do so while studying this lesson, I append a few explanations of the facts on which the above analytic date-words are founded.

“‘Fabian’ was applied to the military tactics of Washington, on some occasions, when he imitated the policy of Quintus Fabius Maximus Verrucosus, a Roman General who not daring to hazard a battle against Hannibal, harassed his army by marches, counter-marches, and ambuscades.” “Bickerings” were incessant during John Adams’s administration between his own supporters and the faction of Hamilton. “Steed”—Jefferson rode on horseback to the Capitol to take his oath of office as President. Arrived there he dismounted and fastened his steed to an elm-tree, since known as Jefferson’s tree. He did this to signalise his disapprobation of royalty, and his preference for democratic equality. “Speculative” were the celebrated “Madison Papers.” “Doctrine”—the Monroe doctrine declared that no foreign power should acquire additional dominion in America. “Unlucky” was correctly applied to John Quincy Adams’s administration. See Barnes’s U. S. His., p. 175. “Unwhipped”—Jackson always came off victorious in all his duels and military campaigns. “Mocked”—Van Buren was appointed by Jackson as U. S. Minister to England. The United States Senate rejected his nomination. This political insult secured much sympathy for him, and helped to make him President. “Hard-cider” was a party watchword during Harrison’s campaign for the Presidency. “Rudderless”—Tyler often changed his political views, and finally turned against the United States Government, of which he had been Chief Executive. “Realm-extender”

—during Polk’s administration the United States acquired the territory embracing California, Arizona, New Mexico, and Texas. “Warproof”—Taylor was a successful warrior. “Licensor”—Fillmore’s administration passed the Fugitive Slave Law, which enabled the Southern masters to recapture runaway slaves. “Looming”—during Pierce’s term the cloud of civil war was looming up in the distance. “Lecompton” constitution of Kansas was a pro-slavery document which Buchanan favoured. “Agitation” preceded and attended Lincoln’s inauguration, and finally culminated in the civil war. “Shall”—Johnson made use of the imperative “shall” in regard to the removal of Edwin M. Stanton, for which attempt he was afterward sought to be impeached. “Chapultepec” was the battle in which Grant entered upon that career of military achievement which secured him two Presidential terms. “Cocoa” was characteristic of the drinks allowed at Hayes’s table at the White House. No wine was tolerated. “Fatal” was Guiteau’s shot to Garfield. “After”—although Tyler, Fillmore, Johnson, and Arthur became Presidents on the death of their chiefs, yet only Arthur succeeded to the Presidency in 1881, which is indicated by the first two consonants of “After.” “Flood”—Cleveland vetoed an unprecedented number of bills during his term. There was a “flood” of them. “Fibrous” applies metaphorically to mental qualities; it means strong, sinewy—high talents, just below genius. “Boom” refers, of course, to the large amount of support which Cleveland obtained on his second election to the Presidency.

#### DATES OF THE ACCESSION OF THE ENGLISH SOVEREIGNS.

From 1000 A.D. to 1700 A.D., the last *three figures only* need be given, and from 1700 A.D. to date only the last

1. Should the pupil find his own analytic date-words in this exercise?
2. How were Washington’s military tactics sometimes characterised?
3. What is the relation between “Bickerings” and John Adams?
4. Why is “Steed” analytic of Jefferson’s inauguration?
5. What has the word “Doctrine” to do with Monroe’s administration?
6. To what book is the pupil especially referred in regard to J. Q. Adams’s administration?
7. Is “Mocked” a case of Con. or Ex. in the case of Van Buren?

two figures require to be given. It is better for the pupil to find his own phrases. A slight acquaintance with English History will make all the formulas here given easily understood. Green's short "History of the English People," Dickens' "Child's History of England" Collier's "History of England," and "History of England," by the author of the "Knights of St. John," may be recommended.

(1) William I. (1066)—(0) Hastings (6) *champion* (6) *justified*. (2) William II. (1087)—He (1) *decorated* (0) his (8) *father's* (7) *grave*; or (0) *silvering* a (8) *father's* (7) *grave*. (3) Henry I. (1100)—(1) *The* (0) *scholarly* (0) *sovereign*. (4) Stephen (1135)—(1) *The* (3) *monarch's* (5) *iar*. (5) Henry II. (1154)—(1) *The* (5) *land* (4) *restorer*. (6) Richard I. (1189)—(1) *The* (8) *fawners* (9) *punished*. (7) John (1199)—(1) *Depriving* a (9) *pretty* (9) *boy*. (8) Henry III. (1216)—(1) "*Third*" (2) *Henry's* (1) *tender* (6) *childhood*. (9) Edward I. (1272)—(2) *On* a (7) *crusade* (2) *unsupported*. (10) Edward II. (1307)—(3) *A monarch* (0) *espouses* a (7) *comrade*. (11) Edward III. (1327)—He (3) *made* (2) *Windsor* (7) *Castle*. (12) Richard II. (1377)—A (3) *monarch's* (7) *collector* (7) *killed*. (13) Henry IV. (1399)—A (3) *monarch* (9) *punished* (9) *borderers*. (14) Henry V. (1413)—A (4) *rioter* (1) *turned* (3) *monarch*. (15) Henry VI. (1422)—(4) *Royalty* (2) *in* (2) *infancy*; or (4) *Arc* (2) *unjustly* (2) *inflamed*. (16) Edward IV. (1461)—(4) *York* (6) *championed* (1) *Towton*. (17) Edward V. (1483)—(4) *Ruler* (8) "*Fifth*" (3) *murdered*. (18) Richard III. (1483)—(4) *Richard* (8) *feigns* (3) *modesty*. (19) Henry VII. (1486)—(4) *Roses* (8) *finally* (6) *joined*. (20) Henry VIII. (1509)—A (5) *lady* (0) *slaying* (9) *policy*. (21) Edward VI. (1547)—A (5) *lad* (4) *royally* (7) *good*; or, a (5) *will* (4) *requiring* a (7) *council*. (22) Mary (1553)—(5) *Luckless* (5) *loving* (3) *Mary*. (23) Elizabeth (1558)—(5) *Elizabeth* (5) *liked* (8) *vetoes*. (24) James I. (1603)—(6) *James* a (0) *Scottish* (3) *monarch*. (25) Charles I. (1625)—(6) *Charles'* (2) *insupportable* (5) *illegalities*. (26) *Council* and *Parliament* (1649)—(6) *Charles* (4) *rightly* (9) *beheaded*. (27) *Oliver Cromwell* (1653)—(6) *General* (5) *Oliver's* (3) *mastery*. (28) *Richard Cromwell* (1658)—(6) *General* (5) *Oliver's* (8) *offspring*. (29) *Council* and *Parliament* (1659)—A (6) *Junta*

(5) *leading* (9) *Parliament*. (30) *Charles II.* (1660)—(6) *Cheerful* (6) *Charles* (0) *Second*. (31) *James II.* (1685)—(6) *James'* (8) *followers* (5) *eated*. (32) *William III.* and *Mary* (1689)—(6) *Joining* (8) *of* (9) *Powers*. (33) *Anne* (1702)—(0) *Submissive* (2) *Anne*. (34) *George I.* (1714)—(1) *Utterly* (4) *resigned*. (35) *George II.* (1727)—(2) *Anspach's* (7) *Caroline*. (36) *George III.* (1760)—(6) *George's* (0) *Sovereignty*. (37) *George IV.* (1820)—(2) *Undivorcible* (0) *Sovereign*. (38) *William IV.* (1830)—(3) *Midshipman* (0) *Sovereign*. (39) *Victoria* (1837)—A (3) *model* (7) *Queen*.

## EXPLANATIONS.

(1) Edward the Confessor, always fond of the Normans, had promised that on his death his kingdom should go to Duke William of Normandy. (2) William II. early directed a goldsmith to decorate his father's grave with gold and silver ornaments. (3) Henry I. was called Beauclerc, or fine Scholar. (4) Stephen had produced a false witness to swear that the late king on his deathbed had named him (Stephen) as his heir. (5) Henry II. revoked most of the grants of land that had been hastily made during the late troubles. (6) Richard punished the people who had befriended him against his father. (7) Arthur had the best right to the throne, but John imprisoned and murdered him. (8) Henry III. was crowned at the age of ten. "Third" tells *which* Henry is meant. (9) Edward I. declared—"I will go on, if I go on with no other follower than my groom." (10) Gaveston was the king's comrade and favourite, and was finally beheaded by the indignant barons. (11) Edward III. erected Windsor Castle. (12) The king's poll-tax collector was killed by Wat Tyler. (13) A successful Scottish war was this monarch's first achievement. (14) Riotous Prince Hal became a spirited, valiant king. (15) Henry VI. was only nine months old when his predecessor died. (16) Edward IV., with aid of the Earl of Warwick, won the great battle at Towton; 40,000 men were slain. (17) Edward V. was only thirteen years old. The Lord Protector, Duke of Gloucester, threw him, with his brother, into the Tower and caused them to

be murdered. (18) Richard's affected modesty is conspicuously brought out in Shakespeare's tragedy of Richard III. (19) Henry VII., to quell forever the hostility of the rival Roses, married Elizabeth of York, the daughter of Edward IV. (20) The formula in this case is clearly justified by history. (21) Edward VI. was but ten years old. Henry VIII. had provided in his will that a council of sixteen should govern during Edward's minority. (22) Mary was fond of her husband, who cared little for her, and unlucky in her advisers. (23) Elizabeth showed the natural arbitrariness of her disposition in her vetoes. In one year—1597—she refused the royal assent to 48 bills passed by the Commons. (24) James I. was the first Scottish king that reigned over England. (25) Charles I. lost his life in the attempt to act independent of the Commons. (26) If anyone thinks that Charles was not rightfully beheaded, he could make the phrase—(6) Charles (4) wrongfully (9) beheaded. (27) The phrase is obviously true. (28) The phrase gives the exact date of Richard Cromwell's accession and the word "offspring" means Richard Cromwell. (29) A Junta here means the "council." (30) Charles Second was called the "merry" monarch. (31) Parliament at once voted James II. nearly two million pounds sterling per annum for life. (32) William and Mary were coördinate sovereigns. (33) Anne was truly "submissive" or easily influenced. (34 and 35) Green intimates that George I. and George II. hardly affected the course of events—the former followed the advice of his ministers and the latter of his wife Caroline. (36) George III. was emphatically a sovereign. (37) George IV. had tried ineffectually to get rid of his wife; her death at last released him. (38) William IV. had been a midshipman in the navy. (39) Victoria has certainly proved herself to be a "Model Queen."

(3) THE PUPIL MUST POSSESS SUCH A FAMILIARITY WITH THE LAWS OF IN., EX., AND CON., NOT MERELY IN THEIR THEORETIC AND ABSTRACT ASPECTS, BUT IN THAT PRACTICAL CHARACTER AND WORKING POWER OF THEM WHICH I TEACH, THAT HE CAN INSTANTLY APPLY THEM TO THE EVERY-DAY AFFAIRS AND ORDINARY OCCURRENCES AND EVENTS OF LIFE.

If you know that the number of square \* miles in the area of the State of New York runs into *thousands*, and you wish to remember that the *exact number* of thousands is 47, you could accomplish this object if you found a word which spells 47, and is at the same time connected by In., Ex., or Con. to New York. You try the varieties of Inclusion; and in synonymous Inclusion you find 47 in the word "York" itself, the "y" having no figure value, and "r" standing for 4, and "k" for 7; thus you cannot *see* the name of New York or *think of it* without having conclusive evidence of the number of thousands of square miles the State contains.

The title of a subject, the name or description of an event or date, can always be safely abridged or bracketed in part in the formula, as 47 [New] York. But no one could imagine that "York" in this connection [47 thousand square miles] means any of the towns or country seats of the United States which are called "York." If the context makes an otherwise indefinite thing definite, it is sufficient.

*Analytic date and number words do not have to be memorised.*—Seeing is believing, and, in this case, *remembering* too. If you thoroughly master my system you can find, in most cases, analytic date and number words without any difficulty, and by means of them you can remember *thousands* of dates and sets of figures, when without the system you could have remembered only five or ten of them.

Suppose in your haste you failed to notice that "York" spells 47, and you then proceed to try Inclusion by Genus and Species; regarding York as the general word, you would find *New York* as a species or kind of York; the same with Yorkshire, Yorktown, York Minster, etc. In this way you would, if your mastery of the Figure Alphabet were perfect, scarcely fail to notice that York spells 47; but if you fail, you then try Inclusion by Whole and Part, and run over the political divisions of the State until you come to *Rockland County*, and there you find in its first two consonants the letters "r" and "ck" (the equivalent

\* See Lippincott's Gazetteer, p. 1573.