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Contents.

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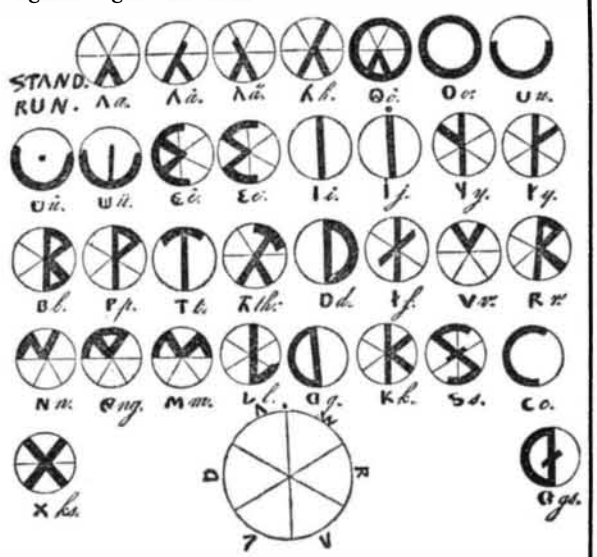
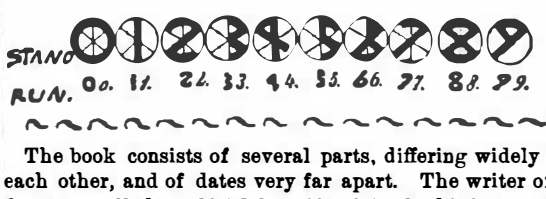
THE OERA LINDA LETTERS AND FIGURES.

The scheme of letters and figures given herewith is a reduced facsimile of a page of that remarkable Frisian manuscript, lately come to light and called the Oera Linda Book, after the family in which it has been an heirloom from time immemorial. The present owner is C. Oera de Linda, chief superintendent of the royal dockyard at the Helder, in Friesland, North Holland. In obedience to a family tradition, the book has been religiously preserved through many generations, though no one knew whence it came or what it contained, both the language and the writing being unknown.

A Frisian scholar, Dr. Verweijs, heard of the work not long ago, obtained permission to examine it, and at once discovered it to be written in a more ancient form of Fries than that which appears in the book of ancient Fries laws, hitherto the oldest known literary monument of that people. The tradition to which the book is indebted for its preservation was found to rest upon two endorsements, the later, by Hiddo, surnamed Oera Linda, being dated the 3,449th year after Atland was submerged: that is, according to Christian reckoning, the year 1,256: the earlier, by Liko Oera Linda, was written in the year 803. Hiddo describes the work as a history of his family and of the Fries people, and earnestly directs his son to preserve it with body and soul; and relates that he had just copied it upon "foreign paper" to prevent its perishing in consequence of a wetting it had got during a local flood. Liko quite as earnestly enjoins his successors to keep the work from the eyes of the monks, who spoke "sweet words," but underhandedly sought to destroy everything relating to the Fries.





The book consists of several parts, differing widely from each other, and of dates very far apart. The writer of the first part calls herself Adela, wife of Apol, chief man of the Linda country. The first date mentioned in it is the year 1602 after the disappearance of Atland, or B. C. 591. The writing was begun thirty-two years later, or B. C. 559. The account is continued by Adela's son Adelbrost and his sister Apollonia. Some two hundred and fifty years later, another book was begun by Frethorik, to which additions were afterward made by his widow, by their sons, and by their grandson. The page which we have reproduced appears in the portion written by Adela, upwards of twenty-four centuries ago: or about the time of Solon, Confucius, the prophet Daniel, Pythagoras, and shortly after the destruction of the first temple at Jerusalem by Nebuchadnezzar.

According to Adela's account, this portion of her book was copied from an inscription on the walls of Waraburgt. The divided circle, with the letters *w r a l d a* around it, is the Jol-wheel, the first symbol of the Almighty, also of the beginning from which time is derived: "this is the Kroder, which must always go round with the Jol." According to this model, Frya (the primal priestess, the first daughter of Earth) formedthe set hand which she used to write her Tex. When Fasta was chief mother, she made a running hand out of it. The sea king, Godfried the Old, made numbers for the set hand and for the runic hand. "It is therefore not too much," says the Waraburgt inscription, "that we celebrate it once a year. We may be eternally thankful to Wr-alda that he allowed his spirit to exercise such an influence over our forefathers."

The Tex of Frya was what we may term the Magna Charta of the Frisian people. Fasta was the first Eremœder or chief priestess, appointed by Frya, some time in the happy period before the dispersion of the Frisians by the sinking of their country beneath the waters of the North Sea. The Jol feast was the midwinter festival, now called Christmas.

The Waraburgt inscription further narrates that Finda's people, that is, the yellow race, whose surviving remnant in Northern Europe is the Finns, also had a system of writing; but it was so difficult and full of flourishes that they lost the meaning of it. Subsequently, the Finda people, including the Thyria and the Krekalanders (Tyrians and Greeks) learned the Frisian text, but corrupted it so that it lost its legibility.

Touching this reference to the Greek alphabet, the learned translator of the Oera Linda book calls attention to the acknowledgment of the Greeks that their writing was not their own invention. They attributed the introduction of it to Kadmus, a Phœnecian. The names of their oldest letters, from *alpha* to *tau*, agree so exactly with the names of the Hebrew letters, with which the Phœnecian was closely connected, that there can be little doubt of their source. But the forms of their letters differ so entirely from those of the Phœnecian and Hebrew writing, that in that particular no connection can be thought of between then. Whence, then, did the Greeks derive the forms of their letters?

The book of Adela's followers shows that, at the time Kadmus is said to have lived, a brisk trade was carried on between the Frisians and the Phœnecians, whom they called Khadmar, or coast people, a name too closely resembling Kadmus to escape a suspicion of identity.

The same book also describes, at length, the founding of Athens by a Frisian colony, whose priestess was Min-erva, and the subsequent deification of Min-erva by Grecian priests, who sadly corrupted the pure religion she had introduced. This, in connection with the Waraburgt inscription above described, makes it very clear how it came to pass that the earliest Greek letters had, to a marked degree, the forms of the Fries letters, with the names of the letters of Finda's people.

It is even more surprising to find our current figures existing, in so perfect a form, from such remote antiquity. The scheme is suspiciously perfect: still, the internal evidence of the genuineness of this remarkable record of a civilization in Western Europe, antedating Athens and the Trojan war, is too cogent to be lightly set aside.

The single circumstance that the writers of the record were perfectly familiar with the pile dwellers of Switzerland, whom they call Marsaten and describe at considerable length, is proof enough that the book is either as ancient as it purports to be, or else is a very recent forgery. Previous to 1853, when the first remains of that people were accidentally discovered, there was no other record of their existence. We usually call our figures Arabian, but it is well known that the art of expressing all numbers by means of ten signs was unknown to the Arabs of the East. It was learned in the West. Perhaps, if a few more records of Friesland had been kept from the monks, the matter would not be under such a cloud. Our figures are also called Indian, and their currency in the East is quite consistent with the story of this book, since a considerable part of it is devoted to the fortunes of a Frisian colony in the Punjab (established B. C. 1551), from which a knowledge of the numerals, as based on the lines of the Jol, may have been communicated to the surrounding nations. No names of places in this colony are given; but it is narrated how the Frieslanders first established themselves on the east of the Punjab, and afterwards moved to the west of the rivers, in both of which localities the sun was directly overhead, at midday, in summer time. Confirmation of this account is found in Herodotus and Strabo, who speak of a people then called Germans; in the writings of the historians of Alexander's expedition, who speak of an Indian colony from the distant unknown North; and Ptolemy, who mentions two places called Minnagara, one 24° north, on the west side of the Indus, the other 6° to the eastward, and in north latitude 22°. The name is pure Fries, and comes from Minna, chief master at the time the exhibition sailed.

WORK AND WAGES IN NEW YORK CITY.

The New York *Times* has recently published some elaborate and suggestive statistical information relative to the present condition of labor and wages in this city. The principal result and indeed the most striking one adduced is the marked falling-off in the numbers of the trades' union members. These societies have lost fully two thirds of their strength since 1873, and a membership of 48,180 in that year is now reduced to less than 18,000. It needs no especial discernment to see the reason of this; it is the logical effect of the disastrous strike of 1872, succeeded by the financial crisis of 1873. The one demonstrated the fallacy of trade union domination, the hollowness of the promises of those men who provoked the agitation and urged and compelled others to join in it, and the misery and privation which must inevitably follow a struggle where the strength and union and staying power of those sought to be coerced is in marked contrast to the disorder and weakness of those who assume the aggressive. It cannot be denied that the results of that uprising dealt the cause of the unions a terrible blow, and it only needed the sudden collapse of the pecuniary resources of hundreds of employers, and the consequent enforced idleness of thousands of workmen, within a period too short for a complete recovery from the effects of the strike, to reduce the trade societies in this city from a great, to a comparatively insignificant power in the labor market.

Few can adequately realize how sudden and vast a change in the condition of labor took place when the financial panic swept over the country. Perhaps this can best be gleaned by a short retrospect of the condition of affairs in 1872, when the great strike occurred, and a comparison of matters then with matters now. At that time the total number of workmen employed when the shops were full was 82,938, out of which aggregate 61,050 men joined in the strike. As this last mentioned total is obtained from trade union records, it follows that the balance were non-society men; so that in 1872 there appeared but 20,888 men outside the unions, or, in other words, the membership of the latter was in the proportion to outsiders of about three to one. At the present time the total number of workmen is 76,350, of whom 18,000 are society men. The proportion now is exactly the other way, the non-union men having a majority of over four to one

Now the strike of 1872 was based on the very obvious

fallacy that "ten hours pay should be given for eight hours work;" and this, reduced to its simplest terms, amounted to a demand for 20 per cent more wages. It is instructive to place side by side the wages then paid (in a vain effort to force which to higher figures the workmen threw away $1,674,950) with the wages of to-day. By the aid of the *Times'* article, we have prepared the following table:

Trade.	Trade union scale of wages per week before panic.	Lowest trade union scale of wages per week now.
Carpenters and joiners	$21	$15 down to $9 (8 hours)
Bricklayers	$27	$12
Stone cutters	$27	$21
" masons	$27	same but often infringed
Plasterers	$30	$12 (8 hours)
Shoemakers	$20 to $30	$10 to $18
Brass molders and finishers	$18	$15 (mainly piecework)
Fresco painters	—	$10 to $15
Painters	$27	$15
Goldbeaters	$14 to $18	$10 to $12
Sailmakers	$20 (piecework)	$15
Carriage builders	$21	$15 and $12
Caulkers	$24	$21
Coopers	$20	$10
Cabinet makers	$18	$10
Varnishers and polishers	$18	$10
Machinists and blacksmiths	$18	$10 to $ 2 (piecework)
Iron molders	$21	$12
Box makers	$20	$12
Laborers	$15	$ 6 to 12

If we may take this as an index, the reduction of wages is something over 33 per cent; and therefore men are now gladly receiving pay one third less than that which they struck against in 1872. Nor is this all: a still more impressive contrast is yet to be drawn. When the strike broke out in the last mentioned year, the signs of prosperity were everywhere, the shops were reasonably full, and the aggregate of 82,938 persons given above shows the men actually employed at the time. But as is well known, works stopped, employers failed, and men left for other localities: hence we account for the difference of 6,588 men which there is between the numbers of workmen then and now; but besides these is a deficiency which does not show, namely, the ratio of employed to unemployed. Out of our 76,350 working men, 25,210 are idle. Therefore not only have wages been reduced one third, but the actual supply of work has fallen nearly two thirds. In brief we employ one workman to three employed in 1872; and for the wages then paid to three men, we now obtain the labor of four.

Turning now from general conditions to separate trades, it is easy to trace, in the decline of some, the natural effect of the cessation of the unnatural haste which characterized the expansion of certain industries. Take, for example, building. In 1869 real property in this city would sell for fully one fourth more than it now will, and rent in the same proportion. As a result every one who had unimproved lots built on them, and our higher uptown streets presented the anomalous spectacle of block after block of mere shells of houses rising like mushrooms with astonishing rapidity. Then was the harvest time for the bricklayers, and the masons, and the carpenters, and their wages were $5 and $4.50 per day. But as soon as the financial trouble came—in fact, as soon as the strike began—work stopped, and as it has not been resumed, and probably will not be for a great many years to come, to an equal extent, necessarily the trades thus depressed have suffered severely. On the other hand, the hatters, the bakers, the tailors, and all who contribute to human necessities, although their trade is dull, have undergone no heavy losses.

The metal trades have been as severely affected as the building trades; and in general, it appears that all those callings whose work involves capital to be laid out have suffered. People are not poor for if they were, the fact would be apparent among the carriage, pianoforte, cigar, and cabinet makers. For articles of luxury there is a fair demand, but not at high prices. The tendency is to economize and hold on to money, as witness the extremely large surplus in the hands of some of our city savings' banks, one institution having over four millions, another over two millions, and others over one million of dollars above their liabilities.

The signs, on the whole, are encouraging, for habits of thrift and a persistent opposition to high prices will speedily bring down living expenses, from the unnecessarily high figure at which they now stand, to the rates obtaining previous to the war. And this done, and the purchasing power of wages increased, we may soon look for the return of substantial prosperity to our industries.

THE DRAINING OF THE ZUYDER ZEE.

In the year 1170 the waves of the ocean, driven by a hurricane, broke down the dunes and dikes on the northern boundary of Holland, and, pouring in upon the low land, converted a thriving and populous district into an inland sea. There are scores of quaint and curious legends regarding the submerged cities in the Zuyder Zee; and it is said sometimes that, when the water is still, the turrets and pinnacles of the ancient buildings can be recognized protruding above the ooze and mud on the bottom. For seven centuries this great lake has existed; but long before the close of the present century, the islands of Uik and Schokland, once hills, will again be hills, and where now the storms beat up waves, as high and as dangerous as any in the North Sea, will be a broad expanse of fields and pastures.

There is no country in the world which possesses a greater interest to the engineer than does Holland. Her sea shores are lined with the great dikes built of Norway granite, timbers, turf, and clay, heaped up to a hight of thirty feet or so, and broad enough at the top for two wagons to drive abreast. Over a billion and a half of dollars have been expended in making these vast embankments. The canals, which form a perfect network of waterways over the country, are wonderfully substantial; so also are the country roads, with their triple line of trees, between the leafy arches of which one can drive for miles in the shade. But the greatest of Dutch engineering work is the draining of the lakes, ninety of which already have been converted into arable land. It took sixteen years of continuous operations, including three years of pumping by gigantic engines, to remove the water of Haarlem Lake, which covered an area of seventy square miles. Now, however, in the draining of the Zuyder Zee, a task has been begun which throws all previous undertakings far in the shade, and which, as a colossal piece of engineering, will take rank with the Suez canal, and the Mont Cenis and British Channel tunnels.

The Zuyder Zee covers an area of 1,200 square miles, about equal to that of Rhode Island, less Narragansett Bay. Of the provinces which constitute the Netherlands, North Brabant, Gelderland, Friesland, and Overyssel extend over a larger area. North and South Holland, Zealand. Utrecht, Groningen, Dienthe, and Limburg are all smaller. All the area of the Zuyder Zee will net, however, be drained, it being the intention to remove the water from but 753 square miles. Of this total 73 square miles will be devoted to dikes, roads, and canals, leaving an extent of 680 square miles of arable land. The new province of Zuyder Zee will then rank tenth in point of size—Zealand and Utrecht being smaller—and will render Holland about one eighteenth larger than it is at present.

The preliminary soundings have recently been made, and have shown most satisfactory results. With the exception of along the coasts and about the sand banks, the bottom of the lake is a deposit of 160 feet of clayey earth. This soil is rich almost beyond description. It may be used for crops for a century without impoverishment. We have been informed that, at the time of the separation of Belgium from Holland, when for four years the countries were in a state of war, the frontier cities of Holland were protected by large inundated ditches. When peace returned, these bodies of water were drained, and the soil devoted to agriculture. The deposit precipitated even in so short a time resulted in enriching the land so that never before had it yielded such enormous crops, and even now that section is one of the most fertile in all Holland. Now, with 160 feet of the richest earth at his disposal, it may easily be imagined that, with his proverbial agricultural skill, the Dutch farmer will some day astonish the world with the extent and magnitude of the vegetable productions gleaned from the bed of the Zuyder Zee.

In a few months the plans for the whole work, now being made by Heer Leemans, of Kampen, will be submitted to the government, and operations will shortly follow. These will last probably some sixteen years. Pumping will continue for two years and eight months. The average depth of the lake in the portion to be drained is 14·4 feet. The volume of water to be lifted and discharged on the other side of the dike is 306 billion, 505 million cubic feet. The pumping machinery will aggregate a force of 9,440 horses, and will lift 158,850 cubic feet of water per minute, or 228,787,200 cubic feet per day of 24 hours.

ANOTHER OBNOXIOUS POSTAL LAW.

Since the assembling of Congress, the people have patiently awaited the repeal of the obnoxious postal law, passed during the closing hours of the last session, the effect of which was to double the postage on transient newspapers, magazines and periodicals, books, and merchandise. It was generally understood that this much desired measure would early engage the attention of our representatives; but although the House has taken satisfactory action with moderate celerity, it still hangs in the Senate, having been referred to the Committee on Postal Matters, of which Senator Hamlin, the originator of he very objectionable law passed last winter, is the chairman. This committee has been engaged in devising an entirely new schedule of rates for third class postal matter, which has recently been laid before the Senate by Mr. Hamlin. The act fixes the following rates:

For distances not exceeding three hundred miles, one cent for each two ounces or fractional part thereof; for distances between three hundred and eight hundred miles, two cents; for distances between eight hundred and fifteen hundred miles, three cents; and for each additional thousand miles, one cent additional for each two ounces or fractional part thereof. A special rate is, however, proposed for transient newspapers and magazines, namely, one cent for every two ounces or fractional part thereof for any distance not exceeding one thousand miles; but for any greater distance, double this rate is to be paid.

The object of this discrimination is to relieve the government of a portion of the expense involved in carrying the mails over long distances, in sparsely settled portions of the country, and thus to place the post office on a basis which shall more nearly approximate self-maintenance. This is all that the most earnest supporter can urge in behalf of the bill, which otherwise is a marvel of stupidity and vexation. It is a retrograde measure, reminding one of the rates 30 years ago, when 6c., 12c., 18c., and 25c. were the charges on letters, the rate depending upon the distance. But no intelligent person demands or expects the postal service, in which every body has an interest, to be self-sustaining like the Patent Office department, whose receipts are in excess of its expenses every year. In fact, there is no tax that the public pay more willingly than that due to postal deficit; all they ask is that the department be economically managed, and that business capacity be shown in making contracts for carrying the mails, etc.; but no one desires to reduce the accommodation it affords to the public.

The immediate effect of the proposed measure will bring chaos on all the postal affairs to which it relates. It presupposes a geographical knowledge throughout the entire population, which never could exist. Not only must a man know the distance of every post office from his residence, but the distance of every post office from every other post office, else he could not stamp his packages correctly. As it would require a public of Zerah Colburns to keep such mathematical knowledge in their heads, tables will have to be prepared, and the people taught to use them; or else the postmasters, especially at large centers, will have to employ clerks for the express purpose of imparting the necessary information. Publishers and business houses mailing packages of papers, books, or merchandise will be put to vast inconvenience, for the distance of the destination of each packet will have to be determined before the required postage stamps can be affixed. Then when errors are made, in prepayment, the post offices will be filled with periodicals and bundles retained for short postage; and the service will be put to more expense, in notifying the senders of the fact.

The bill is fifty years behind the age. It is a retrogression to the earliest days of the existence of the post office. That system went out of existence when the ten cent postage to California was abrogated; and its principle was then scouted as an absurdity. The people want no more tinkering of the postal laws for the benefit of the express companies—a fact too plainly apparent. The immediate result of the law which it is now sought to repeal has been a large decrease in the receipts of the post office, for the government found itself left with the most unprofitable part of the service, the long distance carriage; while for short distances the people have used the expresses, whose rates are cheaper.

The outcry which arose all over the land last winter, when the public appreciated the effect of Senator Hamlin's ill considered law, should have indicated to that official the drift of public sentiment, sufficiently well to have prevented his perpetrating the present blunder. The people feel that the mail is a great and useful vehicle for the dissemination of knowledge, and that it is, moreover, a valuable convenience for the distribution of seeds and other light merchandise among the agriculturists throughout the country. Senator Hamlin's bill should not pass; and the sooner Congress sets about fulfilling the will of the people, by simply repealing the present unjust law and re-enacting the old one, the sooner will it merit the approbation of the public.

TO OUR SUBSCRIBERS.

At this season of the year, many thousands of subscriptions are renewed, and a large number of clubs comprising new names are formed; and we are happy to state that our old patrons have never renewed their subscriptions at the commencement of a year more promptly, and we have never had so large an accession of new subscribers as have come to us since the 1st of January.

If any person fails to receive the paper or any premium to which he is entitled, we would thank him to inform us at once. Notwithstanding the provision we had made for a large increase in our circulation, by printing several thousands extra of the first ten numbers of the year, we find some of the editions already exhausted, which will prevent our sending complete sets of back numbers from the commencement of the volume. The first six numbers can be supplied, and some of the subsequent issues, but, we regret, not all. If persons, when remitting their subscriptions, express a wish for such back numbers as we can supply, those not out of print will be sent: otherwise, the subscriptions will commence from date of their receipt.

Our mail clerks, wrapper writers, and folders are under special injunctions to write the subscriber's name and address legibly, and to fold the paper neatly. We shall be glad to be informed if any one receives slovenly work of any kind from this office.

It is our desire to give satisfaction to every person doing business at this office; correspondents should write over their own signatures, and give address legibly, enclosing a postage stamp. No attention is paid to inquiries if the name and address of the writer is not given.

DEFEAT OF THE SEWING MACHINE MONOPOLY IN CONGRESS.

The Committee on Patents of the House of Representatives has reported adversely on the application of A. B. Wilson for an extension of his patent for sewing machines. This is the celebrated four motion feed now used by the Wheeler & Wilson and other machines. The dispatch to the Associated Press says that the application has been before Congress for several years; and protests against the extension have been received, during that time, signed by nearly one million persons. All of the small sewing machine companies, which had been required to pay a heavy royalty to the sewing machine combination composed of the four leading machine companies, have fought the extension savagely. This refusal will ultimately reduce the price of sewing machines very greatly, as soon as the four-motion feed becomes public property. The Committee say that the applicant has already made two or three large fortunes out of his invention, and that it is time now to give the public a chance. The testimony taken before the Committtee shows that the cost of making a sewing machine is not more than from $12 to $15.

This action of the House Committee defeats the scheme of the monopolists for the present session, but will not prevent a renewed attempt hereafter.

M. NOMAISON has devised a simple apparatus for removing the bark from timber, an operation now commonly performed only when the wood is in soak. He proposes a small steam generator which sends dry steam into a chamber in which the wood is enclosed. Under the influence of the steam, the bark easily peels off.