Scientific American.

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Our Planet before and after the Flood-Its Poles Changed.

A correspondent in Ohio asks our opinion respecting a change in the position of the poles of our planet during some period of its history -such as at the general Deluge. We will endeavor to present some peculiar information in support of such a change, as deduced from sacred history and scientific discovery.

The "Nebular Hypothesis" assumes that the materials of which our planet is composed were once in a state of gas or nebulæ; thus agreeing with the history of our earth as given by Moses, that there was a time when our planet was not as it now is, and as it is forcibly expressed by St. Paul, "the Worlds were framed by the word of God, so that things which are seen were not made of things which do appear." The account of the creation of our world as given by Moses, tells us, that the Earth was prepared—like a ready furnished mansion, for man, before he was introduced into it. Geology confirms this statement—it stands out as a positive fact in Science, as well as revelation, only the majority of geologists, seem to entertain the opinion that our planet was countless ages in preparation for man's reception, not six solar days, as stated by Moses. But the account given by Moses may admit of a construction, which can explain much that is contended for by geologists. Our planet may have been in a state of desolation, when the command went forth "Let there be light," and the six days works of creation, no doubt describes, what was done, to fill the earth with order, plenty, and beauty, as it was before the flood. Our planet may have undergone many changes, and it may have been the abode of strange creatures, previous to its present sacred history, and some great convulsion or convulsions, may have destroyed all life, order, and beauty in it, and it may have so remained for a number of ages, previous to the period, when the Mosaic account of our planet commences.

The crust of our earth presents many evidences of great and sudden convulsions, and two periods of such actions are recorded by Moses; one when the seas, were gathered together into their mighty basins, and the other at the Deluge, when "the fountains of the great deep were broken up;" thus showing that scripture and geology are agreed in some very important particulars, and as Moses was no geologist, it is not a little surprising that he should furnish a key to unlock some of the mysteries

of geology.

Many peculiar changes, must have taken place on our planet before the Deluge. Sacred history describes a condition of things very different from that which now exists. Thomas Burnet author of a curious history of the earth put forth the theory two centuries since, of a change in the position of the poles of our planet at the flood. He attributes this change of of all suspense" in relation to the caloric ship. position to a comet striking our earth as a chosen messenger of God. Previous to that event, he asserts that the axis of our planet was in the plane of the ecliptic (Jupiter's is nearly so) consequently there existed over its whole surface, a constant warm climate, except immediately around its poles. This theory seems to for publication. The impression that would accord with geological discoveries which have naturally be conveyed to the mind of those unbeen made since Burnet's day, and is confirmed acquainted with the history of Hot-Air Engines by sacred history. The remains of such ani- is erroneous. nals as now live only in tropical countries are it now possesses. These things can be explain-

seal, and they stand as a garment, from the wicked their light is holden. Hast thou entered into the treasures of the snow: the waters are hid as with a stone, and the face of the deep [ocean] is frozen?" This is strange language about taking away the light from the people dwelling at the poles, and about the freezing of the sea. The people of Palestine never see frost, except on the heights of Lebanon, and the author of the Book of Job-as a man-certainly knew nothing personally about the freezing of the sea. In Gen. 8th chap. and 22nd verse it says, "While the earth remaineth, seed time and harvest, cold and heat, summer and winter shall not cease." This is a promise that certain things were to continue to exist in the future, and the plain inference is. they did not so exist in the past. It is owing to the inclination of the poles of our planet, that we experience the vicissitudes of the seasons. In reference to this and the language of Scripture which we have quoted, the astronomer Hind, who has discovered so many of the asteroids, says-"the inclination of the poles of our earth amounts at present to 23° 27' but is subject to a very slow diminution not exceeding 48" in 100 years. It will not, however, be always on the decrease, for before it can have altered 1° 80', the cause which produces this diminution must act in the contrary direction, and thus tend to increase the obliquity. But this change of obliquity can never become sufficiently great to produce any sensible variation of climate on the earth's surface. This perturbation of obliquity will never become very great or very small, and explains how effectually the Great Creator has ordained the means of carrying out his promise to Noah, though the wayit was to be accomplished remained a hidden secret until the discoveries of modern science placed it within human comprehension." The Bible and Science, we therefore see, harmonize respecting a change at one period, in the position of the poles of our planet; and they also harmonize respecting other great changes, which have taken place in its interior and on its

The Ericsson Again. To the Editor of the Commercial Advertiser.

Your notice of the approaching trial trip of the caloric ship suggests that such a delay has occurred in the matter as is a subject for complaint. Apart from the fact that the enterprise is altogether of a private character, allow me respectfully to remind you that while the steam engine is the work of two generations of engineers, and its perfection the result of several thousand repetitions, the caloric engine, which you appear to think has required too much time for completion, is only the second of its kind. Nor is this engine a model. It is constructed on a scale of the first magnitude. Considering, then, that I am endeavoring to attain at one stride a result more important than that which has kept the engineering world busy for half a century, you will, I am sure, on reflection, not press your call on me for an immediate "termination

I am respectfully,

J. ERICSSON. New-York, Jan. 25, 1854.

[The above is another letter of Capt. Ericsson, addressed to one of our daily papers, and we are sorry that he ever sent such an epistle

The enter prise is not altogether of a private often found in Siberia; and the skeletons of ele- character. No one has endeavored to give it ing such substances. The patented plan of phants are not unfrequently exhumed from be- more of a public character than Capt. Ericsson Gail Borden, Jr., for combining the extract of neath the streets of London, not over twenty himself. He has lectured upon his Hot Air flesh meat with some flour, in a biscuit, cannot feet under the surface of the ground. The Engine from diagrams and models, and oth- be surpassed for various purposes. Another skulls, teeth, and other remains of hyenas and ers have also lectured publicly on the sub- plan is to heat meats contained in tin canissuch tropical animals are abundant in some of ject, no doubt at the solicitation of those ters, in a kettle containing a solution of the the British caves, thus showing that Britain at interested in the "Ericsson." What is the enchloride of calcium. The meat is put up in each one period enjoyed a far warmer climate than terprise? The substitution of that air encanister, and all soldered tight, excepting a gines for steam engines to propel ships. It very small hole on the top. When the solution ed by supposing the poles of our planet to have | is not the copartnership of the owners of is heated up to 212°, the water which is combeen changed according to the theory of Bur- the Ericsson, the ship itself, or Capt. Ericsson, bined with the meat begins to pass off out of net. In the 38th chap, of Job, it is said "hast | but his public effort to supersede the steam en- | the small orifice in a state of steam. When thou caused the day-spring to know its place, gine. A letter dated Jan. 6, 1853, from G. B. La- this is continued for a short time (about five that it might take hold of the ends of the earth | mar, who is stated to be one of the owners of minutes) a person who stands ready with a sol- | in close rooms particularly in sleeping apart-(for ends read poles) that the wicked might be the Ericsson was published in the Savannah dering iron and a cloth, catches a canister, ments.

shaken out of it? It is turned as clay to the "Republican," which contains the following passes the cloth over the orifice, drops a place for ten miles an hour on a first experiment, (a fact, when we remember that steam made at first only four miles an hour), which places the ly sealing "meat canisters." new invention on an impregnable basis." "I consider Capt. Ericsson's fame beyond Fulton's." dozen times for less than one of the U.S. steamers would cost, and be ready for any other service as long as her hull will last-this, too, without expending any time whatever to repair her engine." "Congress ought to buy Capt. Ericsson's patent and throw it open to the public."

> This enterprise is just so much a public affair that Capt. Ericsson, through his counsel, proposed to the late Secretary of the Navy, Hon. J. P. Kennedy, to build two frigates with 10 miles per hour, and the Secretary commendgreat invention for the use of the Navy, and the passage of a resolution to direct him forth- during the operation. with to make a contract with Capt. Ericsson for the construction of one Ericsson frigate of not less than 2000 tons, and to appropriate \$500,-000 for this purpose."

And yet Capt. Ericsson calls it altogether private enterprise, and this even after the invitation given to part of the corps of the New York Press to attend on the trial trip, where they made themselves so ridiculous. Capt. Ericsson is now certainly indulging a good joke at their expense, considering their present silence and their former laudations about the wonderful success of the "Ericsson." They certainly take it very placidly to be now snubbed up by Capt. Ericsson for daring to call on him for an "immediate termination of suspense in relation to the Caloric Ship."

A false impression is conveyed in the above letter, respecting the steam engine and the hot air engine. The present steam engine is not the work of two generations of engineers and many thousand experiments; nor is it true that the hot-air engines of the "Ericsson" are the second hot air engines ever made (the impression naturally conveyed, although Ericsson adds, of its "kind.") The steam engine of the present day is not different in principle from the one built by James Watt for the "Clermont," the first successful American steamboat. In detail it is-but every essential principle was embraced in that engine, and from the first it was successful. Watt's patent expired in 1800 and in 1827 the brothers Stirling took out their patent for a hot-air engine, so that it is now exactly twenty seven years since the hot-air engine was first invented. Has it attained to the same perfection of the steam engine of 1800 since 1827, when in the former year there were only four steam engines on the whole continent of America? No, and yet Capt. Ericsson is indebted to steam engineers for nearly all the essential features in his hot-air engine and no credit given to them-no, not one word, but he leaves the public to infer, by passing over everything which has been done for him by steam engineers for fifty years past, and making no allusion to the Stirlings, that he is working out something entirely new, which will bury the labors of the Watts, Fultons, Stevensons, Napiers, and all other eminent engineers, at home and abroad, in oblivion. Such modesty is rather too strong for us.

Preserving Fruits and Meats.

A correspondent solicits a receipt for preserving fruits, meats, and vegetables, by the exclusion of air from them.

There is more than one method of preserv-

statements—"It [the Ericsson]can be relied on of melted solder on the hole, and applies a piece of ice at the same time to lower the temperature of the vessel. This is the mode of hermetical-

The chloride of calcium does not boil until it attains to 302°, while water boils at 212°, so "The 'Ericsson' would go to Japan and back a that while the steam is passing off from the meats, the calcium solution is still 90° below the boiling point.

Fruits are preserved by charging bottles containing them, with carbonic acid gas, to expel all the air, then sealing them up with air-tight covers. By simply boiling in water, fruits and meats contained in glass vessels, for about twenty minutes, then corking them up tight while the steam is passing off-covering the cork with a luting of pitch or wax, and then cooling hot-air engines, to be propelled at the rate of the vessels quickly below the boiling point, meats and fruits so treated, are said to keep well ed to Congress the "immediate adoption of the for a year. The vessels should be made of annealed glass, otherwise they are liable to break

The Great Telegraph Case.

On the 30th ult., Chief Justice Taney delivered the decision of the U.S. Supreme Court, in Washington, in the great Telegraph Case, of Morse vs. O'Reilly, which has been for several years past before the Court. The ease was brought up, from the Circuit Court of the District of Kentucky, wherein Prof. Morse was granted an injunction against Mr. O'Reilly, for using an electro-magnetic telegraph, styled the Columbian Telegraph, constructed by Messrs. Zook & Barnes. The suit was commenced in Kentucky, in the summer of 1848. The Supreme Court decided in favor of perpetuating the injunction granted in Kentucky against O'Reilly, and makes each party defray their own

The Court sustains the first sever claims of the patent granted to Morse, and all the claims in the second patent, we believe, are also sustained without qualifications. The eighth claim of the first patent the Court decided ought to be disclaimed.

The reports which have appeared in our Daily Papers, respecting this decision, are contradictory, and as a true copy of that decision has not yet reached us, we postpone further remarks on the question, excepting to say, that, from public and private information received by us the decision confirms the very doctrines we have always advocated.

Rules of the Patent Office Relating to Foreign

For an American patent, when an applicant seeks to make his case a preferred one, in con sequence of having received a foreign patent, he should temporarily file the patent he has obtained in the Patent Office with a specification (provisional or complete) attached, or file a sworn copy of these. But when such papers -or copies of them-cannot be conveniently furnished, it will be sufficient, if the reasons of such inability be set forth by affidavit, specifying the fact, that a foreign patent has actually been obtained, (giving the date), and showing clearly that the invention so patented covers the whole ground of his present application.

Bank Notes -- A New Discovery Wanted. On our advertisement page will be found the offer of a reward of \$500 for a new and useful discovery to prevent the alteration of Bank Notes. The advertisement is longer than any we are in the habit of admitting, according to a general rule, but it is one of so much importance to the public that we could not but adnit it freely and recommend it strenuously the attention of chemists and others.

In a letter received by us a few days since, from R. C. Bristol, the inventor of the rotary engine, illustrated by us in No. 9 of the present volume, he informs us that he is putting an engine constructed upon his plan in a steamer of 200 tons burden, at Ohio City, O. This will give the inventor an opportunity to test thoroughly the efficiency of his engine.

It is said that one of the most distinguished physicians of New England ascribes the fearful increase in cases of paralysis to the use of stoves