



#### Important Telegraphic Improvement.

The Baltimore Sun notices an Electro-Magnetic Registering Machine, which overcomes the hitherto supposed impossibility of registering legible and durable communications by means of the primary current alone. The inventor has charge of a telegraphic station in the State of New York, where he has had his instrument working for some time, being merely connected with the main line of wire, hence doing away with all the trouble and expense of a local battery. A common metallic pen is firmly fixed in a holder, and is fed with ink by a most ingenious contrivance, while the fillet of paper is drawn under it at a short distance below the point, while a nicely balanced lever, acted upon by an electromagnet placed within the primary current, communicates its pulsations to the paper, causing it to approach and recede from the point of the pen, from which it receives the telegraphic character, durably and legibly written with ink—the principle of its action being the fact that a fillet of paper can be caused to vibrate with as little power as can the vibrations necessary to make the connections between the poles of a local battery while the pen being stationary is easily kept supplied with ink by a very simple and certain apparatus.

We cannot see any advantage in this improvement.

#### The Niagara Bridge.

The foot-way of the Suspension Bridge which spans the gulf of Niagara for a thousand feet, is now completed. Foot passengers now walk across from the dominions of Uncle Sam to the dominions of Aunt Victoria for 25 cents. This is a great work, not only physically but morally. It will promote intercourse and good will among the republicans and royalists. Difference of opinion regarding governments, should never make men enemies.

The towers for the great bridge will be commenced forthwith, just in the rear of those that sustain the cables for the foot bridge, and before the year 1850 the whole work will probably be completed, and a train of cars will pass over it. The number of those who visit the bridge as a matter of curiosity is quite large, and the income derived from that source is sufficient to pay a handsome interest on the amount expended.

#### Lighting of Streets.

The lighting of streets was not introduced into Paris till 1524, and then only during the winter months. London was not lighted, throughout the year, by government till 1736. Though gas-light was known in China ages previous, it was unknown in Europe till 1792.—William Murdoch first applied its use in his house and offices. By Mr. Winsore it was first used in the London theatre in 1803, and on one side of Pall Mall in 1807. The extent of pipes of the London Gas Light Company now exceeds one hundred and fifty miles, and the capital invested in the works and apparatus is estimated at three million pounds sterling. How the lovers of the beaten track should frown on this grand improvement, which has not only not stood the test of ages, but is scarcely older than a century!

#### Interesting Relic of Antiquity.

The bottom of an ancient vessel, supposed to have been under water many centuries, was dug out of the mud off the American wharf, Southampton, England, a short time ago. It is supposed to be of Danish build, is about 60 feet long by the keel, very sharp, with a great rake at the bow, all of solid timber, and the outside timber from three to four inches thick.—There are no signs of any iron-work found about her. It appears that she had but one mast, which stood in the middle. Her timbers and plank were perfectly sound. The wreck was raised by Mr. Loosemore, of the American Hotel. In first lifting her, she broke off at the floor heads, owing to the heavy weight of mud in her.

#### Substitute for the Crank.

A Mr. Andrews of Mississippi, has constructed a machine designed to dispense with the use of the crank in all applications of steam to machinery. A strong chain of particular construction is used in its stead, with suitable machinery to operate on the chain, which produces all the motion that can possibly be produced by the use of a crank, and that motion, steady, smooth and regular, entirely free from the jarring and shaking produced by the revolutions of a crank, the power at all times being the same. There are no dead points to pass, and thus all the power created is advantageously employed, with all possible ease and convenience. It is made to run either forward or backward, or put at a neutral point where it will not drive either way, and in that situation the steam can be worked off without any reference to any other machinery commonly used for that purpose.

For the above we are indebted to our exchanges, and we are unable to give credit to the original. There are but few who are aware of the many plans already tried to supersede the crank, but no one that we have seen can be compared with it. The dead points are not the bugbears some would make them to be.

#### A Clean City.

The village of Brock, near Amsterdam, in Holland, is said to present the most remarkable example of uniform neatness, and punctilious attention to cleanliness, that the world can produce. It is chiefly inhabited by the wealthy farmers, who live in affluence upon the income of their lands. Wagons and carriages are not allowed to pass through the streets, the pavement of which is kept in the best possible order; while the foot-walk, which is as clean as scrubbing brushes can well make it, is sanded and marked out into fanciful ornamental figures. The doors and porches are burnished, and the trunks of the trees which grow before them, are polished by frequent scrubbing. To gain admittance at the front door is a favor not to be expected, except by persons of some consequence, and if the shoes of a visitor happened to be a little soiled, a pair of slippers is presented to him at the door, which he is to use as a substitute during his stay.

England may take this city as a sample of sanitary reform, and there is an evidence in the people of the village of Brock which proves the truthfulness of the old proverb—"they are always clean who can buy soap."

#### A Yankee Feat.

Charles Ellett jr., the architect of the Niagara Falls Suspension Bridge, thus describes his first passage over the foot bridge:—

"This morning I laid the last plank of my foot bridge on the Canadaside, and then drove over and back again in a buggy. Five hundred feet of the bridge was without railing on either side. My horse, though spirited, went along quietly, touched up occasionally with the whip, just to show him that he was in command and give him courage.

On returning, I directed one of the drivers to bring on his team—a two horse closed carriage, weighing altogether over a ton and a half. I took his place on the box and drove over and back. The horses went quietly. The flooring is but eight feet wide, 220 feet high, 720 feet long, and without praising, over such a torrent as you never saw, and never will see any where else!"

Ellett must be a brave man. It was a fearful scene to behold him driving a horse and wagon along a narrow bridge with but two feet to spare on either side and the boiling river two hundred feet below. In point of cool and quiet daring we do not recollect of a single feat on record to equal this.

#### Swarm of Bees in a Chimney.

At the house of Mr. Van Alstyne, Pine Plains, Dutchess Co. N. Y., may now be witnessed the rare spectacle of a swarm of honey bees in a chimney. They have commenced their labors near the mantel piece of the first floor, and may be heard in any part of the room. This swarm of bees entered the chimney about the middle of June. They may be seen going in and out at the top, as actively as if they were at work in a hive.

#### Freaks of Electricity.

The great lightning storm of 19th of June which extended 700 miles in length, presented at Trenton, N. J. some facts that are deserving of particular record. The extensive iron works at that place, belonging to Peter Cooper Esq., New York, became charged with electric energies from the storm. The iron damper connected with iron chains, was attempted to be lowered during the storm. The first person that laid hold of the chain was knocked down; a second made the attempt and shared the same fate, and a third received a severe shock. A fireman stirring the melted iron in the turnace, received a shock when he touched the molten metal with his iron stirrer. A tin dripping pan under the bellows was bruised as if a 56 lb. weight had fallen in its center from a great height. There were in the works at the time between two and three hundred men, and about 2000 tons of iron, some in a state of fusion, some in a heated state, and the residue cold.

#### Fattening Horses.

On his visit to the stud of the Pasha of Egypt, Col. E. Napier says—"Among other things I happened to mention the India system of fattening horses on chopped sheep's heads, and was not a little surprised when he said that he could the more readily credit it, as to his personal knowledge the Arabs of the Hedjaz often feed their horses on the dried flesh of the camel, as well as its milk, and that in some of the districts along the coast, when barley was scarce, even dried fish was used for them as an article of food."

The gluten of the plant and the muscular fibre of the animal are almost identical, and yet they are chemically different. We are indebted to Professor Mulder, of Utrecht, for the observation, that if gluten, albumen, casein, fibrin, &c. be dissolved in caustic potash, and an acid be then added to the solution, a white matter is separated which from every one of these substances is the same—which exists in and from 95 to 99 per cent. of them all, and to which he has given the name of protein. In fact these substances are all compounds of protein, with minute proportions of sulphur and phosphorus; it is upon these minute proportions of sulphur and phosphorus that the differences observed among these several substances as they exist in the animal and the vegetable in a considerable degree depend.

#### The Asparagus of the Cossacks.

In the Gardiners' Chronicle it is stated that, "of all the authorities we know, Dr. Clark is the one who gives the fullest details respecting the utility of the Typha. He found the inhabitants of Tcherkask so enthusiastic with respect to the excellence of the typha, that they regarded it as a sacred plant, a special gift of Providence. The lower parts of the stem are brought to the tables at every meal and in every house bundles are to be found, about three feet in length, tied like the asparagus, ready for use it is sold in the markets and among the provision merchants. It is best used in spring, like our asparagus, when the plants begin to shoot. It is said that in this state it forms a dish which those who have once partaken of it desire again, with increasing relish."

#### Food & Slavery, Freedom and Starvation.

Russia is a paradise in comparison with England; as in the former country, although the people are not called freemen, they are not starving to death. And the worst feature of English starvation is, that there is food enough in the country to feed the whole population with abundance, but the poor people cannot earn wages enough to buy it! Good beef can be bought in St. Petersburg for two cents per pound, and there is plenty of money.

#### Deprivation of a Princess of her Distinction.

The Madrid Gazette of 29th ult. publishes a royal decree, depriving Her Royal Highness the Dona Josefa Luisa de Bourbon, sister of the King, of the honors and distinctions of an Infanta of Spain, for having married M. J. G. Rente, a person of American origin of much inferior rank.

#### Cast Iron Saddles.

A mechanic in Wilmington, Delaware, has invented a cast iron saddle, which is represented to be both excellent and cheap.

#### Harvesting Machines.

Seven farmers in Illinois have published a Card in the Chicago Democrat, stating "that having purchased each of us one of Esterly's new and improved Harvesting Machines, and being all of us present this day at a full and most satisfactory trial of the same, believe that we shall render the public a service by declaring, that in our opinion, every difficulty encountered during the past season, in running this machine, has been entirely overcome; that very great and important improvements have been made since the past harvest in their construction; and that in our opinion they are now a perfect labor-saving machine, capable of performing with ease and certainty all that was ever claimed in their favor by the friends of this improvement, being simple in their operation, constructed so as to be both light and substantial, and easily managed by one person, with either two or three horses, as the nature of the ground may require."

This is indeed a high recommendation and the machine no doubt is a valuable one.

#### Mechanical Magnetism.

The application of electricity as a motive power to machinery, was the invention of the distinguished Prof. Henry, Professor of Natural Philosophy in Princeton, and Secretary of the Smithsonian Institute. He constructed a small machine, which is still preserved in Princeton, and which is interesting, as being the first instrument by which a regular motive power was obtained from that subtle agent.—It bore somewhat the appearance of the working beam of an ordinary steam engine, and was so arranged that the descent of one side of the beam cut off the current and changed its direction around the magnets. The positive poles thus became negative, and vice versa. The beam was attracted at the other end, and repelled at this. But the return of the beam operated as a cut-off again, and the opposite end was repelled by its magnet, while this end was attracted.

#### The Locomotive in Italy.

A railroad is soon to be opened in Tuscany, from Leghorn to Florence,—entirely the product of British enterprise. Even the fuel consumed is shipped from England. The contrast between the bustle and excitement of railway travelling and the indolent and primitive habits of the people, is said to produce a singular effect. Says a traveller in that beautiful land, "the wooden forks, and broad heavy scythes, and misshapen carts, and uncouth ploughs, have not altered their shapes since the days of Scylla. The hand loom has not been removed, and the homespun material is still carried by the frugal housewife to the market. There is not a machine shop in the land."

#### An Ancient Eagle.

An American Eagle has been presented to M. Vattmare, in aid of his system of international exchanges, by William Feene, Esq. a native of Ireland, residing in Washington. It was captured on the Potomac, near Mount Vernon, about forty years ago, and is now nearly half a century old. In 1824, it presided on the triumphal arch under which Lafayette passed, and on the Fourth of July last participated in the ceremonies of laying the foundation of the Washington Monument.

A machine called a "patent excavator" was set on fire last week at Mount Hope, Quincy, and nearly destroyed. The machine was a new one, and cost \$6000, and was owned by Mr. William Evans, who is employed under contract to fill up the flats at South Boston, Mass.

A number of our farmers are complaining of potatoe rot. It would be better to drop the cultivation of the potatoe entirely, than to plant with a certainty of failure.

Tobacco is said to be a good antidote to the bite of the snake or the dog. The tobacco should be moistened in the mouth and applied to the wound as soon as possible.

A large agricultural meeting has been held in England and a Mr. Slocum awarded a medal for the introduction of agricultural tools from the United States.

An English company has commenced the successful cultivation of the Assam tea plant in Upper Assam. It is thought that it will yet be a great opposition to that of China.