# Scientific American.

# INVENTIONS.

#### Sawing Felloes.

Asa George & Seth Stubbs, of Lincolnton, N. C., have taken measures to secure a patent for a useful improvement in a machine for sawing felloes and other articles forming parts of circles. The nature of the improvement consists in providing a revolving table on which the plank or stuff out of which the felloes are to be made is placed; this table is so arranged as to have different centres, either of which may be employed as desired, so that the felloes may be cut to form parts of circles of different diameters according to the centres on which the stuff is placed. The saw sash is of ordinary construction, and two saws are secured at one end of it, and made adjustable, so as to cut felloes of different widths. There is a stationary table adjoining to the movable one, on which the plank partially rests, while the saws are cutting to keep the stuff firm and steady under the saws.

#### Machine for Making Sheet Metal Tubes.

Orson W. Stow, of Southington, Hartford Co., Conn., has invented a new and useful improvement on machinery for forming sheet metal tubes, for candle moulds, dipper handles, lamp tubes, &c., and consists in a peculiar mode of operating a die rod which torces the sheet metal into a concave bed, and thus makes one half of the tube, and then in combination with this action there are folders attached to movable wings which have their axes of motion coinciding with a line passing longitudinally through the centre of the die rod spoken of, these folders, by properly bending the sheet of metal over the half of the die rod, form the other half of the tube. Measures have been taken to secure a patent.

#### New Machine for Splitting Leather.

Henry F. Patton, of Deansville, N. Y., has invented some improvements on machinery for splitting leather. The nature of the invention consists in the employment of a knife having a horizontal reciprocating motion imparted to it by a serpentine cam which is secured on the end of the feeding roller that is placed behind the knife, and which draws the hide through between the two gauging pressure rollers in front, against the edge of the knife. It is common to have but one gauge roller on leather splitting machines. this one has two, the extra one being placed above and entirely separate from the lower one: it is secured on a frame attached to springs, and acts as a pressure roller, thus enabling the knife to operate upon the leather in a very correct and superior manner. Measures have been taken to secure a patent.

## Improvement in Pumps.

L. P., and W. F. Dodge, of Newburg, Orange Co., N. Y., has taken measures to secure a patent for an improvement in doubleacting lift and force pumps. The improvement consists in connecting the valves of the two pistons by a tube encircling the rod, whereby their simultaneous operation is insured, one closing at the precise moment the other opens.

## Improved Hinges for Blinds.

Messrs. W. French and W. C. Whipple, of New Haven, Conn., have invented an improvement in hinges for blinds, the nature of which consists in the employment of a latch arranged and attached to a hinge in a peculiar manner, by which the shutter or blind may be secured in an open position, without the necessity of using catches at the outer edges of the blinds, and hooks in the wall, as is now the case with common blinds. Measures have been taken to secure a patent.

### New Rifle Pistol.

Mr. Marston, of New York city, the inventor of the breech-loading rifle, which receives its name from that of the inventor, has made some fine pistols on the same principle. They are better, we believe, than the revolvers, and should be introduced into the navy, and all our cavalry regiments.

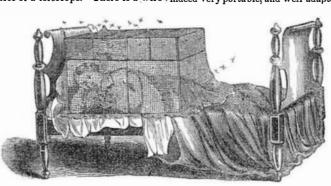
# Hydrochloric Acid.

he has employed hydrochloric acid with great success in dysentery. He employs one drachm of the acid of commerce diluted with half an ounce of water, and given in 20 drops in half of the growing crop; it effectually cleans a a gill of sweetened water every sixth hour four foot row by three furrows. The opener,

#### WILLARD'S MOSOUITO FRAME.

beds, invented by J. A. Willard, of Alton, Illinois, who has taken measures to secure a patent for it. The trame is made of wire, with joints, formed into small pannels; it can be folded up so as to be carried in a valise, and then be stretched out over the bed, and the net spread over it, as represented in the figure. The top is separate from the sides, and is com- sented in this engraving. One of these frames posed of extension pieces of wire, which slide can be folded up, and will not occupy a space into one another (for beds of different widths)

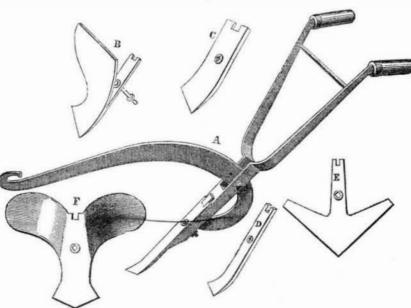
The accompanying engraving is a perspec- | clamp which fastens the frame to the headtive view of a frame of a mosquito net for board, and then it is expanded and the top cross-pieces inserted, after which the net is thrown over, when the mosquitoes may buzz and dance about as much as they please, for their own amusement or benefit, but they cannot raise a blister on the man who happily has provided himself with one of Willard's frames and nets, like the sensible gentleman repreof more than twelve superficial inches. It is like the cases of a telescope. There is a wire indeed very portable, and well adapted for per-



sons who are travelling. On the Sacramento south are not able to surpass it, for the whole river, in California, the mosquitoes are to be insect tribes from the swamps of Jersey and seen in clouds, and are the terror of travel- Long Island, have discovered that here they lers; one of these frames, with a net, weigh | need not weary their wings in search of subonly a few ounces, and can be carried about jects, but at once, in the language of the imwhithersoever a person travels, so that if he mortal Campbell, "like reapers descend to the has to sleep on the banks of the Sacramento, harvest of death." on the cold ground, he can easily stretch his frame, spread his net, and bid defiance to all | E. & Ira Buckman, Jr., model and pattern the mosquitoes in California. A number of builders, No. 94 Fulton street, this city. Ditgentlemen in this city (New York) have seen these trames, and are about to furnish their Buckmans' factory, and all the requisite infordwellings with them. This city is not a little | mation given about every thing connected

These mosquito net frames are made by B. ferent sizes of frames can be seen at Messrs. distinguished for its mosquitoes; cities further with it, both as it respects price and use.

#### FORMAN'S PATENT PLOW.



The accompanying engraving is a view of a | F, opens a very wide and deep furrow, and February last by James H. Forman of Sha- will do the work of two turning plows. By fer to different parts of the plow. A is a plow beam, the plow can be adjusted to any size of stock with subsoil share attached; B is the horse, or to dip to any required depth, even to and F is the opener. A plow for one horse not subject to wear, as the share effectually weighs about from 30 to 35 lbs.; that for two shields the foot. This plow is very portable soil shareattached, one horse, Mr. Forman in- not occupy more than a cubic foot, and all the forms us, will break stiff clay land eight inch- parts can be put together, ready for work, in es deep; and by preceding it with the turning two minutes, and any good smith on a planshare, a depth of twelve inches may be obtained. The medium share with one horse, will break from four to five inches deep on one and a half acres in one day. With the turning share, one good horse will do more ridging and bedding, and do it better, on the land in Alabama, than two horses can do with Dr. Davis, of Syracuse, N. Y., states that the Eagle Plow. The sweep can be adjusted so as to run from one to two inches deep, thereby cutting up the roots of grass-killing it—and clearing away weeds around the roots

wrought-iron plow invented and patented in when the land has been previously broken, ron, Chambers Co. Alabama. The letters re- the adjusting pin, and the extra holes in the turning share; C is a medium share; D is a the burying of half the beam. It requires no subsoil share; E is a sweep or grass killer, clevice, has but two bolts and one rivet. It is orses weighs about 40 lbs. With the sub- each one can be packed in a space which will tation can make it. This plow is well adapted for southern culture, and we have betore us the certificates of six planters in Alabama, who are now using it, who say they believe it to be more durable, and better adapted to all required purposes generally, than any other plow with which they are acquainted.

More information may be obtained respecting it, by letter addressed to Mr. Forman, at Lafayette, Oak Bowery, or Sharon, Chambers Co., Ala.

#### New Electric Globes.

A new improvement is now in operation in 'years without deterioration.

Paris, which will consist of large globes of crystal placed on the top of every column now along the Boulevard, for public use. In the evening these globes will be illuminated with electric lights, and will produce an immense blaze over the public road. The experiment has already been made, and proved very successful. Our opinion about it is, that the light will be more brilliant than profitable, but Louis Napoleon le Grand can afford it.

#### Active Principles of the Scullcap. The following is taken from the Eclectic Journal of Medicine :-

"Scuteline.-This is obtained from the blue, or as it is usually called bitter scullcap. There are several species of this plant, that are used as medicine; but the above is the only kind that contains any valuable medical properties.

It is a common practice when treating on the remedial agents, in the light of discoveries, to say, that 'this remedy is one of the best,' the 'most valuable,' and 'one of the greatest discoveries of the age,' etc. Now, it is possible, that I am as liable as any one, to run into this foolish and quackish mode of expressions: vet expressions of this kind to the scientific and thinking mind, are disgustive and repulsive. The scuteline, is entitled to these eulogies, if any medicine, but it is sufficient to say of it, that it is a valuable medicine.

In its pure state, it is a white powder. . The process of obtaining it is somewhat difficult, and too tedious to insert here.

MEDICAL PROPERTIES AND USES .- It is inlicated in the treatment of nervous diseases, especially those attended with debility, which have been induced by the use of tea, coffee, tobacco, alcoholic drinks, or any poison habitually taken into the human stomach. Who has not witnessed the dried and mummy-like appearance of the tea and coffee drinker?-How often do we see the emaciated, cadaverous-like palpitation, nervous irritability, all the result of the free use of the above articles. The true physician will never prescribe physic to cure bad habits: but this much he should do, teach his patients to avoid the exciting cause of his disease, and then with proper remedial agents, aid the recuperative powers of nature restoring a normal condition of the system. The scutelline being a nervine tonic, is peculiarly adapted to this end. It is also useful in the treatment of tetanus, convulsions, tremors and chorea. It is generally supposed that no method of treatment is successful in the cure of chorea; but in the incipient stages of this disease, the scutelline will be found a successful remedy. Dose, one to two grains, from two to six times a day.

#### Inflammation of the Bowels.

Dr. Hoyt, of Boston, instead of treating this disease in the old common mode, by blood letting, calomel and opium, &c., he lays down the following rules:

"Give the patient no medicine; nor food of any kind, but allow him to drink water moderately. He should be laid upon a bed and laid in a cold wet sheet, and cold water applied in the folds of a cloth on the abdomen. If the patientshould get cold (which should not be permitted) the cold water application must be suspended, and the patient covered up with blankets kept up from the body by segments of hoops. When heat has accumulated to a higher than ordinary degree, the cold water must be resumed. Water applied internally and externally is the remedial agent depended on, and it is cold enough for this purpose at seventy degrees."

He says he has tested this method of treatmost dangerous disease.

At a late meeting of the Horticultural Society of Edinburgh, a paper was read by Dr. Murchison, on the essence of tea in lozenge form, used by the Chinese as a substitute for tea, when they wish to have the article in a a more condensed form. Some specimens were tested by the members present, and pronounced excellent. In the course of his remarks, Dr. M. showed that the amount ofwater in which the essence is diluted in the form of tea as usually drank, varies from 90 to 99 percent. The lozenges will keep for many