92

Aew

# Scientific American.

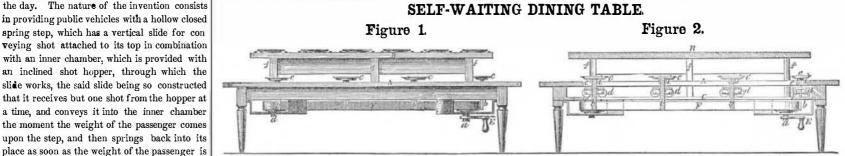
# Taper Auger for Boring Hubs.

Billings Landphere, of Unadilla Forks, N. Y., has invented an improved implement for boring ded with a movable nut, through which the ed a prize of 1000 frances for the best treatise hubs, the improvement in which consists in a screw-rod works, and the back collar has a cir- on the potato; the "New York Tribune" says peculiar manner of securing the screw-rod, to cular plate, which turns in it, said plate having that the best way to improve the potato is to which the cutter is attached in the proper po- an oblong slot for the rod to slide in, and in let the 500,000 soldiers and government sailors sition in the hub. This is effected by means of which it can be secured at any desired position. who do nothing but waste money, time and pow. rings or collars, one of which is secured by The cutter is also of peculiar construction.

set screws to the front, and the other to the back end of the hub. The front collar is provi-

#### Potato Prize.

The Society of Industry in France has offer der, go to digging the soil.



the moment the weight of the passenger comes upon the step, and then springs back into its place as soon as the weight of the passenger is withdrawn. Double the number of passengers will be indicated if they pass out and in at the same door. The inner shot box is locked, and the key held by the proprietor. The inventor has applied for a patent. Extension Carriage Top.

Inventions:

Improved Car Register.

G. M. Ramsey, of New York City, has in-

vented an improvement in city rail car and

omnibus registers for showing the number

of passengers which have rode in them during

G. W. Bachman of Clifton Springs, N. Y. has invented and applied for a patent upon an improved carriage top, by means of which the tops of carriages can be extended farther over the front of the carriage, and thus afford more perfect protection against the weather than those in ordinary use. This is effected by means of an additional bow in front of those commonly used, with a joint nearits lower ends, by means of which it can be folded back when persons are getting in, and in pleasant weather, but can be thrown forward in a storm, so as completely to inclose the top and sides of the carriage. This may be done, or the whole top folded back, without reaching the arms outside, as the joints and braces are arranged differently from those in common use. We like it better than any other folding carriage top we have

## Lever Press.

Elias Davis, of Montpelier, Vt., has applied for a patent on an improved self-acting press, the novelty of which consists in so arranging a series of horizontal and vertical knuckle joint levers below the screw and bed plate, in combination with the peculiar manner of constructing and operating the press that a progressive upward pressure will be exerted upon the article being pressed by its own gravity, and the gravity of the movable portion of the press, and also in combining said levers with the screw in such a manner that when a very elastic substance is being pressed, and the main levers have exerted their full power upon it, a further pressure may be communicated to it by elevating the bed plate.

## Wiring Blind Rods.

Benjamin B. Hill, of Bridgeport, Conn., has invented an ingenious machine for wiring the rods used in making Venetian blinds. The invention consists in the combination of a forming die and punch, so arranged as to form the wire staples and force them into the blind rod, and in the employment of a cutter die arranged so as to cut the wire of which the staples are formed into blanks of the required lengths. The blanks are flattened, so as to enter the wood easily by the operation of the same tool which cuts them. We have seen this machine in operation, and can speak highly of it. It is strongly constructed, and we should not think it liable to get out of order.

novelty of which consists in constructing it with quire to be constantly passed about. an endless band, F, situated beneath the table, and kept in constant motion during meals by and boarding houses. It is in form like an orany power applied at the crank, E, to which dinary table, in the top of which, A, at a proband is firmly attached, at convenient distances, per distance from each side, is cut a narrow the guiding carriers, **b**, which pass through aperture of uniform width, extending nearly cially in those hotels where a man is under the and are supported by small railway tracks, d d, from end to end, and semicircularly around the moving in guiding apertures, e, in the top of ends of the table. The band, F plays around as is too often the case with the hungry travelthe table. Upon the tops of these carriers are upright shafts, a a, and as before stated, keeps | ler. placed waiters, c c, which are constantly passing the waiters in motion. around the table. An additional shelf, B, is Fig. 2 is a sectional view of the table, exhi- Juniata Co., Pa.

and patented a self-waiting Dining Table, the ards, f f, for holding such dishes as do not re- letters refer to like parts as in figure 1.

This table is intended principally for hotels

L. Pusey, of Patterson, Pa., has invented | placed over the center of the table by the stand- | biting these different arrangements. The same

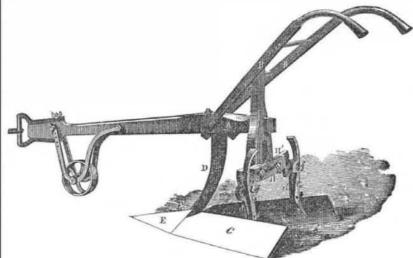
The inventor also proposes to pass pipes around the edge of the table, for supplying the guests with coffee, water, &c., these may, if desirable, be kept hot by any available means. We should think this quite convenient, espenecessity of helping himselt, or going unserved,

For further information address the inventor,

#### IMPROVED CULTIVATOR PLOW.

The annexed engraving is a perspective view | time be made to serve as a center for the blades of an improved Cultivator, invented by L. M. to turn upon, as they are adjusted by the stand-Whitman, of Weedsport, N. Y., which was pa- ards attached to their hind ends. tented Oct. 11, of the present year.

A represents the beam; B B the handles; C The nature of the invention consists in a no- C the adjustable blades or mould-boards, which vel mode of setting the inclined blades and in may be set very steep to throw the soil up constructing the share and the lower part of the against the hills, or less steep to allow it to pass main standard, together with the front end of over them and fall in the open space at the the adjustable blades, in such a manner that center. The front ends of these blades lap over they can all be held together, and in their pla- each other, and are so shaped that they lay ces by one bolt, and the said bolt, at the same snugly on the lower part of the standard, D, and



the front ends of the inclined blades being uni- apart or nearer together. Through the vertical ted by a bolt at E', which passes through them standards, d d, are cut circular slots, e e, in and the share, E. On this bolt the blades are which the set screws, f f, work freely to alter the inclination of the blades. Notches are cut allowed to swing freely.

To the back ends of these blades are firmly in the back of the standards, which are held by attached levers, G G, by which the blades are the set screws firmly against a cog on the front adjusted. These levers carry the fulcrum pins, of each lever. This plow we should think worc c, which connect them with the vertical stand- thy the attention of farmers and manufacturers. ards, d d, of the notched adjustable cross-bars, For further information address S. G. Wise, H H', which serve to move the blades further assignee, Weedsport, Cayuga Co., N. Y.

> Improved Furnace

Shaving by Machinery---Queer Invention. William Johnson, of North Shields, joiner, has invented a shaving-machine. This machine is of singular construction, and contains every qualification necessary for the process .--In appearance it is not unlike an old-fashioned arm-chair. But the most unique feature in the whole affair is the arrangement of the razor blades, which are fixed longitudinally on cylinders, from three to six inches in length, four on each cylinder, at an angle of sixty degrees, with fine camel-hair brushes between; for you are lathered and shaved at one and the same time, the lather being slipped from the interior of the cylinders, which are hollow. The machine is put in motion by the weight of the patient, the seat gradually giving way beneath, and sinking with him until he reaches the ground, when the operation is completed. The seat, rising as soon as it is released from his weight, is ready to commence again without any preparation. A musical box, of Mr. Johnson's construction, and capable of performing a great variety of airs, is appended to the machine, and can be attached or detached according to the pleasure of the person undergoing the operation, so that you may be shaved to any tune you please! Experiments, (says the "Gateshead Observer,") have been tried and found satisfactory.

[This invention will certainly remove the objection made by those who wear long beards, as it relates to shaving and time. All that the long beards have to do is to sit down and off goes the hair like a wool picker. This machine comes of the Yankees visiting England in 1851; the hint was no doubt derived from a flock cutter, and Miniss' self-walking and running chair.

#### Safety Ropes for Buildings on Fire.

A correspondent recommends the shooting of a rope by bow and arrow over buildings on fire, for the purpose of drawing up ladders, or for drawing up another rope with an eye on it, to take off persons, who may ascend to the roof, or who may in high buildings be cut off from coming down by fire below, when no ladder can reach them. The fire safes which are used in London are effectual remedies for such cases. They can be erected from the street in a few seconds, to reach the tops of the loftiest buildings, and we wonder our fire companies have never adopted them here.

Spark Arrester.

Joseph A. Arnold, of Richmond, Va., has invented an improvement in the French & Beard spark arresters, which consists in arranging a series of curved vanes on and around the under surface of a trumpet-shaped deflector, instead of placing them on a vertical stem of the deflector, whereby a longer draft or steam pipe can be employed, and thus a more perfect draft secured. The sparks are also revolved at the moment of deflection, and are thus more readily forced through the perforated chamber. The inventor has applied for a patent.

Daniel Willis, of New York City, has applied for a patent on an improved heating apparatus for cooking purposes or warming rooms, which consists in making the fire chambers in sections and providing each section with a broad horizontal flange which serves for keeping them in place, and as supports for them and also for radiating surfaces. There are also several minor improvements.

Draw Head and Buffer.

David A. Hopkins, of Elmira, N. Y., has applied for a patent upon an improved draw head | tractor, struck a vein, from which he allowed and buffer, which is so constructed as effectual- persons to dig and haul away what they wanted, ly to resist any percussive force, and at the at the rate of 11 cents per bushel." Wish they same time present a yielding resistance to an would do so here.

opposing car, thus preventing the shocks so common at the starting and stopping of trains. The block is of peculiar form for holding the link in either a horizontal or inclined position.

#### Coal in Abundance.

Here is a paragraph from the Fairmount Virginian. "It would astonish people who pay twenty cents a bushel for coal, to see that article dug out of our streets in grading them. Such was the case last week. In grading the street leading to the bridge, Mr. Martin, the con-

# Imponderable Agents. The articles which have appeared in this

volume of the "Scientific American" on the above subjects, contributed by C. W. S., will be carefully reviewed by us in future numbers, commencing two weeks from the present date.

