#### ASTRONOMICAL NOTES.

OBSERVATORY OF VASSAR COLLEGE.

The computations and some of the observations in the following notes are from students in the astronomical department. The times of risings and settings of planets are approximate, but sufficiently accurate to enable an ordinary observer to find the objects mentioned. M. M.

#### Position of the Planets for April, 1875. Mercury.

On the 1st of April Mercury rises at 5h. 14m. A. M., set ting at 4h. 39m. P. M. On the 30th, Mercury rises at 5h. 23m. A. M., setting at 7h. 44m. P. M. Mercury is very unfavorably situated all through the month, as it is far from the earth, and its time of meridian passage is nearly the same as that of the sun.

#### Venus.

On the 1st of April Venus setsat 10h. 07m. in the evening, and on the 30th at 10h. 52m. The motions of Venus can be very easily followed during the month, as its course lies among the bright stars of Taurus. Its change of position at setting should be watched from night to night; it is farther and farther north all through the month.

#### Mars.

Mars rises on the 1st at 7h. 29m. A. M., and sets at 9h. 54m. P. M. On the 30th, Mars rises at 6h. 40m. A. M., and sets at 9h. 40m. P. M. Mars is small, but can be known by its ruddy light, and on the 1st of April it is very near Venus, and sets earlier than Venus.

#### Jupiter.

Jupiter rises on the 1st at 10h. 28m. P. M., and rises earlier and earlier every night, coming up on the 30th at about 8h. 21m. P. M., the star  $\beta^1$  Scorpii rising at nearly the same time. On the 4th, this star and Jupiter are almost nearly together, but at any time during the first week of April the planet, its moons, and the star can all be seen at once in the field of a telescope of low power

#### Saturn.

Saturn rises on the 1st of April at 4h. 25m. A. M., and sets at 3h. 01m. P. M. On the 30th, Saturn rises at 2h. 37m. A. M., and sets at 1h. 20m. P. M. It will be seen that Saturn is above the horizon mostly in the daytime, and therefore is not well situated for observation.

#### Uranus.

Uranus rises on the 1st at 1h, 30m, P. M., and sets at 3h, 34m. the next morning. On the 30th, Uranus rises at 11h. 35m. A. M., and sets at 1h. 39m. the next morning.

### Neptune.

Neptune, which can never be seen without the aid of a telescope, is at present very unfavorably situated, even for the best instruments.

### Sun Spots.

The report is from February 22 to March 18, inclusive. In the photograph of February 22 was seen, on the edge, the last of the chain of spots mentioned in the last report. The pictures of February 25 and February 18 showed two small spots coming on. From February 26 to March 7 photographing and observations were interrupted by clouds; but the picture of March 7 showed faculæ, without any visible spot, on the edge, going off. On March 9 a small spot appeared on the eastern limb, and it was still visible, March 18, on the western limb. The picture of this date shows also a small group coming on, surrounded by faculæ, and two small groups near the center of the disk.

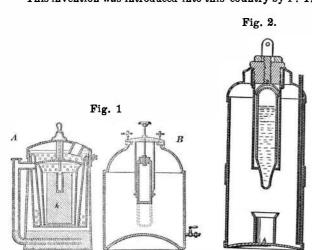
## FIRE APPARATUS FOG ALARMS AND CORK MACHINERY.

Mechanisms of the above named descriptions constitute our extracts from Kuight's "New Mechanical Dictionary \* for the present week.

There are perhaps sixty patents for various forms of the fire annihilator. The devices particularly refer to the modes of construction, the acid and alkali chamber, and the method of mingling the gas-generating chemicals.

THE PHILLIPS FIRE ANNIHILATOR.

This invention was introduced into this country by P. T.

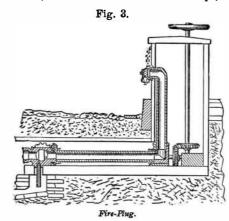


Barnum, the enterprising showman, some twenty years ago. At that time the newspapers of the day were full of its praise. A number of experimental exhibitions were given in this and other cities, and for a time, through Barnum's management, the Phillips fire annihilator was the great sensation of the day. But we believe the great showman, after expending considerably more than his receipts in this venture, concluded that the introducing of new inventions from abroad into our country, which is so much in advance of all

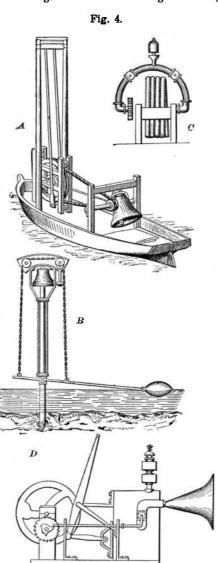
Fire-Extinguishers.

finally abandoned the annihilator enterprise and returned to has a whistle and valve opening inward. The coil contains the exhibition business, in which he has acquired both renown and profit.

The annihilator is shown at A, Fig. 1; it was one of the earliest of these inventions. A compound of sugar and chlorate of potash is so placed as to receive the contents of a bottle of sulphuric acid, which is broken by striking a plug, on the top of the can, when a fire occurs. Around the perforate case which contains the mixture of sugar and chlorate is another case, and this is in a third envelope, between



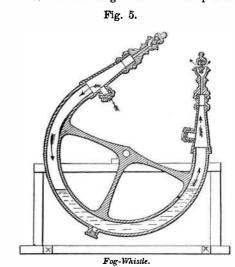
which last and the outer shell is a water space. bonic acid produced by combustion passes out of the top of the machine, meeting on its passage out the water, which is raised in the side pipe by the pressure and heat of the chemical action, and which thus becomes saturated with the gas. A well known apparatus, now in the market, is represented at B. In this the sulphuricacid is in a leaden bucket hung upon trunnions below its center, so that, if set free, the bucket immediately turns upside down. It is kept rigidly upright, however, by a stopper attached to a rod passing through the cap of the apparatus. When the extinguisher is to be used, the stopper is pulled up by an exterior handle, when the bucket turns over and the acid and alkali are mingled, the reaction generating carbonic acid gas. The machine shown in Fig. 2 contains acid in a glass bottle, which



is shattered by dropping upon a stud, when forced below the flanges of the tin cylinder which holds it. An improved

### FIRE PLUG

others in respect of novel devices, was not his forte; and he of tubing oscillating with the vessel. Each end of the spiral a quantity of water, which, in changing its position, forces the air out through the whistles, with a prolonged sound. In D the air is mechanically condensed and stored in a reservoir. The cam on the rotary shaft actuates the valve for the purpose of varying the sounds, to give a series of signals, more intelligible than single sounds repeated. A trumpet and whistle are attached to connecting pipes proceeding from the reservoir. The valve governs the air aperture in the



pipe leading to the trumpet. The fog whistle, Fig. 5, is similar in operation to the device, C, above. The vessel is tubular and semicircular; and as it is oscillated, air is forced

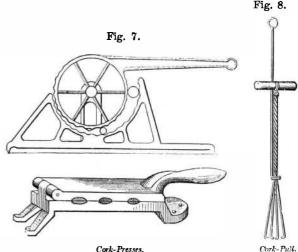
Fig. 6.

Masterman's Corking-Machine.

out by whistles at its ends. Fig. 6 is a

CORKING MACHINE, for inserting corks in bot tles. The workman seats himself with one foot on the treadle, and the handle, h, in his right hand. He places a bottle on the wedge, n, with its neck beneath such one of the three tubes as will contain a cork of suitable size. Such a cork being placed in the tube, a motion of the treadle raises the bottle, and the depression of the lever, hg, drives the cork into the neck. Reverse motions of lever and treadle release the bottle. Two forms of CORK PRESSES

are exhibited in Fig. 7. In the first, the cork is placed between the serrated surfaces of the concave and eccentric cam, and pressed to a less or greater extent by a partial rota-



tion of the latter. The second form is simply a lever press with jaws. Fig. 8 is a

CORK PULL

The jaws, while collapsed by the slide, are passed through the neck of the bottle, and, being opened, are then clasped around the cork, which is then easily withdrawn.

## DECISIONS OF THE COURTS.

#### United States Circuit Court --- Northern District of Illinois.

TRADE MARK CASE.—THE TUCKER MANUFACTURING COMPANY vs. LEVI c. BOYINGTON.

[In equity.—Before Blodgett, J.—Decided October, 1875.]

is represented in Fig. 3. At the point where the branch pipe is coupled to the main, the stopcock is placed, and it is operated by gearing and connecting shafts from a hand wheel in the vicinity of the plug.

FOG ALARMS

FOG ALARMS

are various in their kinds, their operation, and their construction. As shown at A. Fig. 4, the apparatus is erected on the deck of a moored boat, and a pendulous frame is arranged to be swung to and fro by the motion of the vessel. A bar on this frame actuates a wheel, which, by means of a pulley and belt, rings the bell. In B, the clapper is moved by a not arm rises and falls on the waves. C has a spiral coil BLODGETT, J.:

<sup>\*</sup>Published in numbers by Messrs. Hurd & Houghton, New York city.

put any colored label upon it that he chooses, so long as he does not, by his label, indicate that it is the manufacture of the Tucker Manufacturing Company. Now, the only semblance between the label used by the defeatant and the plaintiff's label is that the defendant uses at the same time a perspective of the bed-bottom, and the words "Tucker spring-bed." He does not use the monogram, and uses nothing but what is common property. It is true that he uses the same colored label as the complainant uses. There is no patent trade mark upon the color. Either party has the liberty to adopt any color, green, blue, or all the colors of the rainbow; so that, as the record now stands, I think this injunction must be denied. In passing upon a motion of this kind, which involves to a certain extent the merits of the case. I have, as far as possible, refrained from expressing any opinion that would prejudice the ultimate decision of the court. I think it is right that I should indicate the doubt I have, in order that counsel may determine for themselves whether the case shall go on any further or not.

### Becent American and foreign Latents.

#### NEW MECHANICAL AND ENGINEERING INVENTIONS.

#### IMPROVED GAS REGULATOR,

Joseph Desha Patton, Trevorton, Pa.—This consists of a hinged or pivoted and weighted gate resting on or against the current of passing gas, for the purpose of reducing the pressure and flow thereof. The device is claimed to be capable of nice adjustment so as to form a very efficient and sensitive regulator.

IMPROVED FLOUR MILL AND STAFFING DEVICE FOR MILL-STONES.

David Leib, Rich Hill, O.-In the mill, the novel feature is the combination of the bedstone with an adjustable flanged ring, having delivery spout and top casing to discharge at any desired point. The ring simply fits around the stone and is attached by fastening screws. The same inventor has devised an improved staffing device for millstones. This consists of a supporting plate, that may be attached to runner or bedstone, and provided with horizontal spring standards, that carry at their mortised front ends the bearers of the red staff, that is adjusted by set screws to the surface of the stone. The device is equally applicable to runners and bedstones, and is readily adjustable.

#### IMPROVED CAR STARTER.

Louis Funke, Champion Mills, New Mexico Ter.—This invention consists of a brake drum geared with the axle by a reversing train, and costrived with a spring for storing up the power exerted by the brake in stopping, so that, by shifting the gears after stopping the car, the spring will assist in starting.

#### IMPROVED TRUSS BRIDGE,

Joseph M. McDonald, Tomlinson, Ark.—This consists, mainly, in the construction of an arch made of laterally braced and bolted pieces of alternately interlocking timber, in combination with braced and longitudinally connected side and intermediate trusses.

IMPROVED DEVICE FOR RUNNING BELTS ON TO MACHINERY. Eddy T. Thomas, Boston, Mass.—This consists of a spring hook or button that slides in a socket at the circumference of the driving wheel, and swings over the belt, so as to retain the same until run on the wheel, being then thrown off by the belt.

#### IMPROVED ARCH PLATE FOR STEAM BOILERS.

George Fox and George Fox, Jr., NewYork city.-In place of the solid cast iron arch plate of steam boilers, that is exposed to be burned through by the action of heat in the fire box, the present inventors propose a hollow arch plate connected to the boiler in such a maner that a constant circulation of water is kept up in

### IMPROVED BRICK MACHINE.

David Manley, Franklin, Pa.—In this machine is combined a large amount of new and ingenious mechanism for molding and pressing brick. It is so constructed that the three operations of filling the mold, pressing the brick, and removing the pressed brick may all be performed at the same time

### IMPROVED SAW MILL DOG.

Luke Buzzell, St. Johnsbury, Vt.-This is a dog for holding the log on the head block. It is mounted on a vertical screw having a quick pitch, so that it can be partly or wholly forced into the log thereby, and can be kept in so as not to work loose by the jarring and shaking of the mill. It is specially applicable to the dogging of frozing logs, in which the ordinary dogs will not hold at all.

### IMPROVED COMBINED BOLT AND KEY FASTENER.

Edward H. Schnell, South Norwalk, Conn.-This is a contrivance of ingenious mechanism within the lock for fastening the key inside of the lock after it has thrown the bolt out, and also to fasten the bolt so that the key cannot be turned from the outside by nippers nor the bolt drawn back.

IMPROVED METHOD OF PROPELLING CANAL BOATS, ETC, Louis F. A. Legouge, Wheatland, Cal.-A pair of push bars are here caused to push on each side at the same time, and without intermission, and through a reciprocating revolving motion the poles regain their working position with little or no friction. In order to prevent slip, the push bars are curved at the end on the front side.

### IMPROVED MACHINE FOR BENDING SCYTHE SNATHS,

John H. Russell and George Birner, Milwaukee, Wis.—In using the machine, the wood to be bent is steamed, the movable part of the form is secured in upon the stationary part, and the cross bar is run back to the proper distance from the form. The timbers to be bent are then arranged with their larger ends in the cavity of the cross bar, and their smaller ends in the cavity of the form. The cross bar is then forced forward by turning a screw, pressing the timbers into the form and giving them the desired shape. The cross bar is then run back, pins are withdrawn, the moving part of the form is detached, taking the timbers with it, and the said part and the timbers are taken to the drying room.

### IMPROVED CAR COUPLING.

Duncan MacDougald Campbell, Holly, Mich.—This invention consists in a spring attached to truck and bottom of car, in the rear of the buffer frame, to take up the strain of back pressure andthus prevent injury to the king bolt; also, in a check attached to the truck and stiffening bar of the buffer frame.

#### NEW WOODWORKING AND HOUSE AND CARRIAGE BUILDING INVENTIONS.

### IMPROVED HARNESS HAME,

Benjamin F. Haviland, Danville, Vt.-This is a contrivance of the rein guides of hames, wherebythe rein can be shifted higher or lower, and inward or outward, to meet the requirements of different horses. It is simply an arrangement of one or more upper and lower and outwardly projecting rein guides, additional to the ordinary rein guide.

### IMPROVED MACHINE FOR TENONING SPOKES.

John G. Peace, Salem, Mo.-This spoke-tenoning machine may be applied to the ends of the spokes after they have been driven into the hub, so that the wheel may be finished without moving it from place to place. It consists of a spring auger, that is guided in asuitable supporting piece, which is rigidly clamped to the spoke, producing the exact tenoning of the spoke end by turning the

Charles E. Steller, Milwaukee, Wis.—This consists of a circular grooved disk encircled by an elastic band, and pivoted eccentrically to the sash, so as to act as a wedge to hold the latter against the casing, and so sustain the sash at any desired point. This invention was described and illustrated on page 166, current volume.

#### IMPROVED DIE FOR MAKING CARRIAGE BODY LOOPS

John Garvin, West Meriden, Conn.—This invention consists in wo sets of dies, consisting of the forming dies, made with recess to form the lug, head, and prong. The finishing dies are made with recesses, and there is a projection to finish the loops and form the countersink for the bolt head.

#### IMPROVED HARNESS TUG.

Charles Franklin Towsley, Brinkley, Ark. This invention consists of a metal loop for suspending the thill of a buggy from the back strap. Said loop has a latch piece to open for admitting the thill and closing it in; and also a lining of soft material in the bottom, to avoid wearing the thill. Suitable connections are added for suspending it from the back strap and connecting the girth.

#### IMPROVED WHIP SOCKET,

William Hughes and Joseph K. Alexander, Minerva, O.—This whip socket is so constructed as to enable the whip to be locked in it when desired. It is a combination of a coiled spring and a lock with a whip socket made in two parts, turning upon each other.

#### NEW CHEMICAL AND MISCELLANEOUS INVENTIONS.

#### IMPROVED CARTRIDGE.

Albert Hall, New York city.—This consists in securing the anvil by projecting points in recesses of the shell of a shot gun cartridge, and holding the same by a sheet metal cap piece at the base of the

#### IMPROVED BOTTLE STOPPER.

Charles de Quillfeldt, New York city.—This consists of an elastic stopper applied to a solid cap piece, and hung by a curved slot to a yoke pivoted at the neck band. A lever bail, pivoted to the cap piece below the slot, acts on the yoke, and raises it to the uppermost part of the slotted cap piece, to secure thereby the stopper to the neck.

#### IMPROVED RAILROAD RAIL JOINT.

George N. Hodgdon, Enfield, N. H.-This inventor proposes, as an improvement in rail joints, the combination of the rails, which are laterally braced at their meeting ends, with longitudinal sleepers, that extend on both sides of the joint, and are bound by the cross ties at both ends to provide a steady, continuous bearing for

#### IMPROVED SUSPENDER STRAP.

Francis E. Johnson, New York city.-This inventor makes the button straps on suspenders of woven webbing; and instead of carrying them directly through a ring on the braces, he attaches them to a piece of leather looped through the ring. The straps may be either in two pieces or in one; in the latter case, they are folded diagonally at the point of attachment to the ring connection. Said connection is covered with satin jean, which obviates the staining of the shirt by the leather. The device is simple and strong, and is both convenient and comfortable for the wearer.

### IMPROVED BALE TIE,

Stephen Callanan, Castleton, N. Y.-This consists of a ring bent on one end of a wire, and a hook on the other, such as are employed in a weaver's knot, together with a bend on each wire at the point where the ring and hook begin, or thereabout, in such manner that the hook may be passed through the ring, hooked around the wire above the ring, and then drawn back into it, forming a substantial

### NEW AGRICULTURAL INVENTIONS.

### IMPROVED FLAIL.

Theodore F. Drake, Great Valley, N. Y .- This inventor proposes a light bundle of wires as a substitute for the heavy metal shod flail beater ordinarily used. He considers this device to be just as effective as the latter and much less costly.

### IMPROVED SEED DROPPER.

Hermann H. Koeller, Camp Point, Ill.—This improved device for dropping seed is so constructed that it may be readily adjusted to drop larger or smaller seeds, as may be required, and will prevent the dropping slide from carrying out any more seed than enough to fill the dropping holes of said slide. It consists in combining a centrally pivoted two armed spring with a cut-off block, and in making the cut-off of a side-slotted box, a block with side pins, a spring, a bolt, and certain angle plates.

### IMPROVED SPRING LOCK FOR PLOWS,

Milton K. Wheat, Paris, Ky.-The object of this invention is to hold the plow plate of cultivators, drills, and shovel plows in place when at work, in such a way that, should the plow plate strike an obstruction, it will swing back and thus prevent it from being broken. The device consists in spring lock bars, provided with shoulders at their upper ends, pivoted to the plow beam or the plow standard, and having the plow plate attached to their lower ends.

### IMPROVED STRAW CUTTER.

William H. Harrison, Clay Village, Ky.—This consists of a cam contrivance combined with a curved cutter having a rocker-shaped end, and a roller at each end of the rocker to work in the cam as a substitute for the ordinary pivot. The object is to contrive a connection of the cutter that will not be subject to the lateral play of the cutter common to the ordinary pivots, and which will give a shear cut throughout the whole swing of the cutter.

### IMPROVED REAPER AND MOWER.

Marvin W. Freeman, Beatrice, Neb.-The invention consists in sickles concaved upon their inner sides, and provided with sickle teeth, and in the combination of the stationary adjustable sickles and their bar with the vibrating sickles and their bar, and with dividing fingers and the cutter bar. By using two sickles, serrated, matched, and concave, right and left oblique edges are made to work in close proximity with each other; while by making the upper sickle section longer than the lower one, the whole weight of the former is made to bear on the heel thereof, the main bar and bevel edges of lower sections thus retaining the edges close together until worn out.

### IMPROVED HOG SCRAPER.

Peter Johnson, Wauconda, Ill.—This hog-scraping tool is formed of a handle, with circular and elliptical concavo-convex scrapers secured to its respective extremities. The conformation of the blades admits of all portions of the body being equally reached, and hence of the scraping being more effectively performed.

### IMPROVED SELF-BAKES FOR REAPERS.

Abner S. Smith, Hannibal, Mo.-This is an improved rake for attachment to harvesters and reapers to remove the cut grain from the platform, and deposit it in gavels upon the ground. The novelties are mainly improvements in construction, requiring the aid of drawings for their proper description.

#### IMPROVED PORTABLE FENCE,

Levi Chipman, Vermont, Ill.—This is mainly an improved fence post, which may be quickly set up and taken down, and which requires neither nails, keys, wedges, pins, nor bolts for connecting the panels thereto. It is formed of inclined bars, a notched sill and crossbar, made in two parts, and an upright bar. With this are combined the projecting ends of the horizontal bars of two adjaent panels, placed at an angle with each other.

#### IMPROVED SCRAPER ATTACHMENT FOR PLOWS.

Eugene Slosson, Morris, Ill.—The scraper plates have arms which are pivoted to the standards. The ends of the arms are fastened by wooden pins strong enough to withstand the draft strain under ordinary circumstances, but which, should the scrapers strike an obstruction, will break and allow the scrapers to swing back. The pitch of the scrapers is adjusted by wedges, and there are other useful and novel improvements in construction.

#### IMPROVED CULTIVATOR.

Thomas J. Montgomery and George W. Montgomery, Winchester, Tenn.—The standards are curved outward to bring the plows at the proper distance apart, and then downward, and their lower parts are curved forward to form seats for the plows. There is a new arrangement of braces attached to the standard for sustaining the draft strain, and a bar is provided which acts as a guard to keep the machine erect and cause it to run steady and smooth, and as a gage to regulate the depth to which the plows may enter the

#### IMPROVED CHURN.

John T. Brown, Morrisville, and J. W. Colbert, Fredricksburg. Va.—1 he invention consists of a churn wherein there are two dashers revolved in opposite directions, to produce conflicting currents; also a bearing plate between the cover and an inner shoulder of the churn body, the same being arranged so as to form both a bearing for the dasher shafts and a guard against the exudation of the milk or cream: also a collocation of mechanism with cover, so as to make a single detachable piece.

#### IMPROVED PLOW.

Henry D. Straight, Denmark, Iowa.—This plow is so constructed that the depth at which it works in the ground may be controlled entirely by the handles. The landside part of the mold board is bentforward to serve as a colter to cut the soil, instead of tearing the same, as is ordinarily the case.

#### IMPROVED PORTABLE FENCE.

Tilmon A. H. Cameron, Petra, Mo.-The panels of the picket fence are formed by inserting and securing the pickets in holes in the top and bottom rails. The adjacent ends of the top and bottom rails of the contiguous panels are overlapped, and through them are passed round pickets, which have heads formed upon their upper ends to prevent them from dropping through the said rais. The panels are supported away from the ground by the device, in which a notched sill receives the bottom rail of the panel, and the ends of which are secured to braces. The fence is easily leveled upon inclined or uneven ground.

#### IMPROVED CHURN,

Robert M. Neal, Belle Plaine, Kan.—The object here is to throw the milk into violent agitation, so as to bring the butter in a very short time. This is effected by using both a dasher moving up and down, and beaters revolving in opposite directions, the whole operated by novel and simple mechanism.

### NEW HOUSEHOLD ARTICLES.

### IMPROVED NURSERY CHAIR.

Lewis P. Lawrence, Port Morris, N. J.—This is an ingenious article of furniture, so constructed that it may be arranged for use as a child's high chair, as a low chair and table, as a low rocking chair, and as a low stationary chair.

IMPROVED WASH TUB STAND, CLOTHES HOLDER, AND IRON-ING BOARD.

John J. White, Norfolk, Va.—This invention consists in constructing a hollow stand so that it may receive the soiled clother, hold the wash tubs, and support the ironing board; also in providing opposite inwardly inclined ledges to receive the wash tubs as well as bottom sections, and to sustain the ironing board; also in novel means for holding the bottom sections of the stand in a secure and stable position.

### IMPROVED TABLE LEAF SUPPORT.

Eli J. Wolfrom, Washington, Ohio.-The invention relates to modes of supporting hinged table leaves, and consists in so doing it that the support will be automatically thrown into true bracing position by the act of raising the leaf, and, at the same time, effectively locked against the possibility of displacement.

### IMPROVED WASHING MACHINE.

Thomas H. Peavey, Epworth, Iowa.—The essential feature here is a contrivance of the apparatus for working a swinging washer in a box-shaped tub, so that the projecting portions may be readily detached and stowed away. A table top may be put on the top of the tub, and thus the machine may be utilized for a table when not required for washing.

# IMPROVED KNOB LATCH.

William W. Gardiner, New York city.—This lock is so constructed that the key may be inserted through the knob and spindle that operate the catch boit.

### IMPROVED HEAT RADIATOR,

Emerson C. Angell, New York city.—This is a combination of tubes, rising from a continuously open draft flue, that has a valve near each end, provided with valves just above said flue, and above these valves connected by cross pipes, so that all the flues will empty into a continuous tube, being thus easily cleaned, and a direct or indirect draft being secured. The invention presents a large radiating surface, while tending to economize fuel.

### IMPROVED FOOT-WARMING STOVE

Edwards A. Reed, Oliver Springs, Tenn.—The invention relates to providing the outer box of the foot stove with braces for supporting the chimney, and forming a handle by which to carry the same. The furnace may be withdrawn by a handle from the casing, and used in detached state for cooking purposes, which may be of considerable advantage in traveling.

### IMPROVED CANDLESTICK.

Philipp Schauble and Louis Dohm, Elizabetbport, N. J.-Thls consists of a coiled wire fixed upon a suitable base to serve for the tube of the ordinary candlestick. The upper end terminates in a hook for hanging it up readily, and there is a cup for the bottom of the candle, with a stem projecting out from it through the space between the coils, to raise and lower the cup by screwing it up and down, and to serve for a handle for carrying the candlestick about.

### IMPROVED IRONING TABLE,

Jacob Closs, Decatur, Ind.—This is a new ironing board, so constructed that it may be readily attached to an ordinary table, and provided with a small board, which may be swung over the large board and secured for use, and swung back out of the way when not required.