### Patent Matters in Congress,

Senator Frulinghuysen, of New Jersey, presented (on January 6) a petition from George W. Hunt, administrator of the estate of Walter Hunt, deceased, praying for an extension of Walter Hunt's patent for a paper collar-making machine. It was referred to the Committee on Patents.

Senator Eaton, of Connecticut, presented (on January 8) a petition from Ezra G. Cone, of East Hampton, Conn., praying for an extension of his patent for a sleigh bell. It was referred to the Committee on Patents.

Mr. J. H. Bagley, of New York, introduced (on January 11 into the House of Representatives a bill to protect the reve nues of the Patent Office. It was referred to the Committee on Patents.

### -A Boiling Lake.

The discovery of a boiling lake in the island of Dominica has excited much scientific interest, and investigations of the phenomenon are to be made by geologists. It appears that a company exploring the steep and forest-covered mountains behind the town of Rosseau came upon the boiling lake, about 2,500 feet above the sea level, and two miles in circumference. On the wind clearing away, for a moment, the clouds of sulphurous steam with which the lake was covered, a mound of water was seen ten feet higher than the general level of the surface, caused by ebullition. The margin of the lake consists of beds of sulphur, and its overflow found exit by a waterfall of great hight.

### DECISIONS OF THE COURTS.

United States Circuit Court---Eastern District of Missouri.

PATENT FIRE BRICK COMPOUND.-INTERFERING PATENTS. ALFRED T. FOSTER DS. WM. M. LINDSAY. [Before Treat, J .- Decided October 28, 1875.]

Treat, J.: Treat, J.: This is a suit in equity under section 4,918 of the Revised Statutes of the United States, concerning alleged interfering patents. The defendant's patent was prior in date to plaintiff's; also the application therefor. The plaintiff claims that the invention was by him; that he had, previous to any knowledge thereof by the defendants, not only invented the patented com-position, but actually reduced it to a practical and successful test; that he had shown to the defendants the manufactured article, and when, as their foreman in the brick by means of which they could obtain a large and profi-sule order, he called their attention to the fact that he had exhibited to them before entering upon their service a specime brick of the needed vabequently that they proposed to obtain a patent for that mode of making that he was the original inventor, and alone entitled to a patent, for ewas obtainable. On the other hand, the defendants claim that it was only after a series of the other hand, the defendants claim that it was only after a series of

that he was the original inventor, and slone entitled it on patent, if one was obtainable. On the other hand, the defendants claim that it was only after a series of experiments under their direction and supervision, in their own establishment, that the success of the mode patented was ascertained. \* The defendant in this case, among other defenses, has set up that the patented compound or process had been anticipated and in use before either of the interfering patents had been claimed or issued. The evidence fully establishes the fact. \* The patented compound or process had been anticipated and in use before either of the interfering patents had been claimed or issued. The evidence fully establishes the fact. \* The plaintiff in this case contends that he has the prior and better right, although his application and patent are of subsequent date, and that the court is bound to adjudicate solely as between his and the interfering patent, leading one of the patent, te or those claiming under them. If neither has a valid patent, the court should adjudge both void, and thus end the strife. It is on this theory that the defendant was permitted to set up in his answer the lack of noveity, not of plaintiff's patent alone, but of his own. True, he might voluntarily have surrendered his patent, and contested the plaintiff's right in a suit for infringement; but why should he not, when sued, insist upon a full defense, whereby a second suit, could be avoided? The power vested in the court to adjudge either of the interfering patents whole, on issues fairly made, to decree, not one of the patents alone, but both to be void.

The court so adjudges in this case, and the decree will be accordingly at the costs of the plaintiff.-St. Louis Central Law Journal.

## Becent American and Loreign Latents.

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

### IMPROVED RUNNING GEAR.

Lorenzo D. Hurd, Wellsville, N. Y., assignor of one half his right to Thomas Puller, of same place.-This is an entirely new construction of the running gear of wagons, which cannot be explained without detailed drawings. It however includes several simple devices of much strength, and also is so made that any one of the wheels may rise to pass over an obstruction or elevation, or sink to pass through a hollow, without affecting the other wheels or straining the reach.

### IMPROVED TIRE.

Harry Thompson, Decatur. Ind., assignor to himself and George W. McConnell, of same place.-The invention consists of an outer and an inner rim or band forming the tire. The inner rim, having an inwardly projecting flange at each edge, protects the sides of the felly, and keeps the tire on the wheel. The outer one serves to bind the inner over fast to the wheel, and is kept on by a convex inner face, which shrinks into the concave outer face of the inner rim.

### IMPROVED OPEN THILL.

Conrad H. Matthiessen, Odell, Ill.-The object of this invention is to enable the horse drawing a single or one-horse wagon or sleigh to travel in the regular track in roads where double or two-horse teams are principally used, and at the same time allow the vehicle to follow the regular track. The rear end of the thill is forked an

#### IMPROVED SAW-SHARPENING MACHINE.

Wm. L. Covel, Beloit, Wis .- The object of this invention is to provide a machine for sharpening mill saws. It consists in an adjustable frame pivoted in the center and having parallel guide ways, in which moves a sliding block, to which the saw is detachably fastened. Through said sliding block passes a screw-threaded rod whereby the block and saw may be adjusted in the frame, and to the lower end of this rod is attached a lover, connected through of than with the crank of a slowly revolving shaft, by means of which the saw and block are together elevated and made to approach a revolving emery wheel each time a tooth is sharpened. At the top of the main frame is a pivoted latch feed controlled by a guide, which latch feed moves the saw by engaging with the face of the saw teeth for the purpose of bringing the teeth successively in position for the emery wheel.

### IMPROVED MORTISING MACHINE.

Simeon Duck, Victoria, British Columbia, assignor to himself and Joshua Davies, of same place.—This embodies a novel construction of a machine for cutting square and angular mortises at any desired inclination. The device consists of a tilting bed, by which the material may be carried into any desired inclination to be mortised by a vertically operating tool. A cog segment and worm shaft tilt the bed frame on the rock shaft in longitudinal direction, while a lateral screw shaft admits its position in lateral direction. A longi-tudinally sliding frame is guided in the bed frame, and adjusted by rack and pinion, the adjustable heads of the same holding the material to the tool. One of the heads is arranged with a rotary chuck with holes in its periphery for a pivoted spring clutch, that holds the materials for exposing it rotatively to the action of the tool.

#### IMPROVED IRONING TABLE

Lewis P. Lawrence, Port Morris, N. J.-This is an ingeniously constructed table, adapted to be attached to a ledge or window frame by a spring catch, and having an outside adjustable leg by which the outer end of the table may be placed at any desired hight.

# NEW CHEMICAL AND MISCELLANEOUS INVENTIONS.

### IMPROVED GAS BURNER.

Owen J. McGann, Chicago, Ill.-This invention has for its object to provide an improved mode of attaching the ring holder of a water lens or reflector to its burner, which latter is also provided with a socket, adapted to be detachably applied to the burner of an ordinary gas bracket.

### IMPROVED SPRING SCALES.

Abram Harper and Laroy W. Cross, Edgerton, Ohio.-This invention consists of a contrivance of levers and springs for the support of the measure, so arranged that the weight of the contents of the measure will be indicated on a scale, the levers and spring being concealed in an inclosed base, which protects the apparatus from injury.

### IMPROVED CARBON PHOTOGRAPH.

Claude Léon Lambert, Paris, France.-This is a new process for producing carbon photographs or sun pictures, produced in salts of chromium or other pigments, combined with gelatin or its equivalent, and rendered permanently insoluble by the action of light. The especial features of novelty consist, first, in a compound consisting of water, sugar, liquid ammonia, and permanganate of potassa, to form a bath in which a negative obtained from a transparent positive may be immersed, and thus intensified ; and second, a process of obtaining double tinted prints in salts of chromium and on ordinary albumenized paper, by placing the sensitized paper in a press, the blank for the picture being covered with a black or yellow mask, and the whole being then precipitated by hyposulphite

### IMPROVED CONDENSER FOR ILLUMINATING GAS.

George W. Edge, Jersey City, N. J.-The invention relates to wheels having spiral vanes, and arranged in the pipe leading from the retort to the purifier, so as to be revolved by the current of gas. The impact and rubbing action of the latter on the vanes of the wheels effect the desired condensation of the tar and other heavy matters, which are thrown off by centrifugal force-the rotation being ordinarily near two hundred per minute-and are thus collected in the pipe, and thereby conducted to a suitable place for removal

### IMPROVED HORSE COLLAR.

Jacques Meyer, New York city .- This collar has metallic stiffening plates or hames, which are hinged at the top and locked at the side by means of a hinged piece of the hame entering a socket and spring lock of the other collar section. The terrets and trace fas-teners are connected in rigid but detachable manner to the stiffening hames. The collar may thus be applied without straps, buckles, or other parts visible from the outside, while the ready opening and closing at the side of the neck allows its putting on without the animal stooping or bending down.

#### IMPROVED SIGHT PROTECTOR.

Marmaduke H. Mendenball, Wabash, Ind.—This inventor now improves the sight protector for which letters patent were granted to him January 12 and April 20, 1875, so as to bring the light under perfect control as to quantity, direction, and distance, and at the same time protect the eyes from the glare, intensity, and heat. This is mainly done by the use of suitably adjustable plates of colored glass.

### IMPROVED CIGARETTE MOUTH PIECE.

Diedrich Marquis, New York city.-This invention consists of a cigarette with tapering mouth piece, that is wound with an inner and outer spiral, decreasing in width, to which a wrapper of tobacco paper is connected in spiral shape, to be filled and closed at

### IMPROVED CLEVIS.

John G. Miller, Fredericksburgh, Va.-By this device the plowman, when he turns the team and reverses the plow, can, by means of a rod, shift the doubletree clevis from one to another of the notches of a notched clevis on the beam, to cause the plow to take more or less land, as may be desired.

### IMPROVED SELF-RAKE FOR REAPERS.

Samuel B. Gilliland, Salisbury, Mo.-This rake is operated by a pitman, which connects with a lever operated by a grooved wheel on the axle. When the rake is pushed outward by the outward movement of the pitman, the teeth will be turned down beneath the platform, so as to pass beneath the cut grain lying upon said platform without disturbing it, and that, when the rake is drawn inward by the inward movement of the pitman, the teeth are turned up, so as to sweep the cut grain from the platform. The whole is a simple and doubtless efficient device.

IMPROVED HARROW ATTACHMENT FOR CULTIVATOR PLOWS. Frederick D. Ladenberger, Glenbeulah, Wis.-This is a combined implement, comprising a shovel or breaking plow, two side plows, and two harrows, the two latter being connected to the former by eyebolts and brace rods, and made adjustable in width by means of a curved bar. The farmer is then provided with several useful implements in one.

### IMPROVED PLOW.

Joseph Phillips, Smithton, Ill.-This is an improved cast iron upright for plows, having a flange formed upon its upper end. The ower end is forked, and a horizontal prong is formed upon it, having a longitudinal rabbet upon the rear part of its landside, and longitudinal flanges upon its mold board side, to adapt it to receive the beam, the landside, the mold board, the share, and the handles.

### IMPROVED BUTTER WORKER.

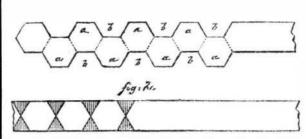
William H. Lilly, Bethlehem, Pa.-The chief parts or elements of this improved machine are a horizontal, continuously revolving bowl having a concave bottom, a revolving worker of peculiar construction, a stationary segmental block for pushing or transferring the worked butter from the side of the bowl towards the center of the same, and a central discharge tube for the buttermilk expressed from the butter. These parts, and the gearing necessary to operate such as rotate, are arranged in a frame having no peculiarity of construction.

### NEW MECHANICAL AND ENGINEERING INVENTIONS.

### IMPROVED MANUFACTURE OF HEXAGONAL NUTS.

George Johnson, Haverstraw, N. Y .- The inventor claims that, by this improved system of manufacture, a stronger nut is obtained, any waste of iron in cutting avoided, and a convenient feeding of the bar to the nut-cutting machine is propuced. In the accompanying engraving, Fig. 1 represents a top view of the

fig:1.



improved bar for making hexagon nuts, and Fig 2 shows the straight bar hitherto employed for making these nuts. The straight blank bar is passed through rolls or dies, and forced into such shape that alternating semi-hexagonal projections and recesses at both sides are produced. The recesses at one side are parallel, and correspond to the projections at the other side. The bar is fed in this shape (on its edge) to the nut machine, being turned after each cutting of the same to bring the nuts always into the same position for the tool. Cutting such nuts from straight bars, as shown in Fig. 2, produces a great waste of iron at the sides in the form of small triangular pieces, and disturbs the fiber of the iron, requiring also the frequent sharpening of the cutting tools, as there are for each nut four cutting planes.

### IMPROVED LEATHER-DRESSING MACHINE.

Bart M. J. Blank, Jersey City Hights, N. J., assignor to Morris Rubens, New York city.-This inventor proposes an improved machine, by which the creasing and polishing of leather may be rapidly and uniformly accomplished. The invention consists of a volving feed rolicr, in connection with a series of creasing or polishing dies, that are secured by gage and set screws to socket grooves of a hollow spring-cushioned tube. The latter is heated from the inside, and capable of being swung back to admit the ready insertion of the dies.

### IMPROVED NAIL PLATE FEEDER.

William H. Field, Taunton, Mass.-In this invention, feeding aws, in which the gripper rod rests, are made to close on the rod, and then move forward the breadth of one nail by a rod moved forward by the machine and backward by a spring. In its backward movement, the jaws open and travel along the rod for a new hold to feed again.

IMPROVED REY FOR LOCK.

Warren H. Guthrie, Hudson City, N. J.-A common device of burglars for entering locked doors is to seize the key from the out-

connected with the axle. This brings the body of the thill about in line with the center of the vehicle, so as to be over the ridge be-tween the two tracks in the road. The forward part of the thill is curved into U shape, so as to pass around the horse's breast and to the body of the thill. The free end of the thill has a joint formed in it, at such a distance from the end, and in such a way, that the said free end may be turned down to rest upon the ground to sup port the tbill in proper position while bringing the horse into position, and harnessing and unharnessing him.

### IMPROVED WINDOW SHUTTER.

Sofie Victor, New Yorkcity.-This is an improved window shut ter that may be readily adjusted to combine the free circulation of air and shade of an awning with the protecting features of the common shutter. It consists of an outer shutter frame without slats, to the top part of which is hinged a separate sbutter, that may be retained in outwardly inclined position by folding brace rods, and folded down to the open frame to be secured.

### IMPROVED FOLDING CHAIR.

Frank A. Patch, New York city.-The side bars of the chair frame are curved, so that their lower parts may serve as the forward legs of the chair, and their upper parts as the posts of the back. Th brace bars of the arms are curved and pivoted to the side bars: the rear bars are attached in similar manner. The seat is flexible, so that the whole forms a chair of strong and simple construction which may be folded into a small space.

### IMPROVED REMEDY FOR RHEUMATISM.

Aug. Severin, New York city, assignor to himself and Frederick Zarnfaller, of same place.-The proposed remedy is a composition of iodide of potassium, solid extract of aconite, wine of colchicum. morphine, and compound sirup of sarsaparilla.

### NEW AGRICULTURAL INVENTIONS.

IMPROVED SHEARS FOR CUTTING HOGS' NOSES. William H. Grow and Crawford M. Sloan, Rock, Kan.-One handle carries an inclined plate which rests against the hog's nose and supports the cartilage while the same is being cut by a blade on the other handle. The blade has an offset at its middle part, so as to leave a portion of the cartilage connected with the nose of the hog by a narrow neck. The end parts of the blade are curved about upon the arc of the upper side of the hog's nose, so as to cut off the rest of the cartilage close to its base.

### IMPROVED POTATO BUG DESTROYER.

Isaac W. Griscom, Woodbury, N. J.-This is an apparatus mounted on wheels, and so designed as to be drawn over the plants. The poisonous powder is placed in a hopper, in which is a stirrer and other devices, which reduce the powder to a very fine state before it passes to a distributing device, which finally sprinkles it upon the plants beneath.

side by a fine pair of nippers, turn it, and so draw back the latch. The present invention prevents this by means of a swinging stapleshaped guard hung to the key and surrounding the wards, so that, when the key is in the lock, each of the key holes will be filled by a wedge-shaped plate, which prevents the introduction of nippers or the planting of a drill.

### IMPROVED WATER WHEEL,

Cloud Chalfant, Penningtonville, Pa.-This invention is an improvement in the class of horizontal outward-flow water wheels. The improvement consists chiefly in providing the wheel with vertical rising and falling buckets, and in adapting the wheel to be raised and lowered within the stationary case.

### NEW HOUSEHOLD ARTICLES.

### IMPROVED BED BOTTOM.

Elias Stillwell, Rockville, Mo.-The object of this invention is to provide a cheap, comfortable, and elastic bed bottom, without the use of slats or springs as ordinarily employed ; and it consists in two inside detachable rails, over which a stretcher of canvas is placed. The said rails are kept apart by notched bars, and have arms which rest upon a subjacent support, and, when pressed down from the weight of the occupant, tighten the canvas. In combination with said rails are employed one or more bolts on each side, which pass through the bedstead rails, and also the detachable rails, to prevent the accidental displacement of the latter.