lamp chimney $J$ and deflector $P$, said deflector $P$ being supported by a bracket affixed to said plate independently of said lamp and chimney, substantially as and for the purpose specified. 3rd. The coinbination of the chimney $J$, chimney-supporting plate $M$ resting at its nation of tive ends upon the eccentrics L, eccentrics L and lamps C, said respective ends upon the eccentrics $L$, eccentrics $L$ and lamps $C$ said
plate $M$ and the chimneys thereon being adapted to be raised and plate $M$ and the chimneys thereon being adapted to be raised and lowered by turning said eccentrics, and said lamps engaged with or
disengaged from said ohimneys, substantially as and for the purpose disengaged from said obimneys, substantially as and for the purpose
set forth. 4th. In an oil stove, the combination, with the body A, of set forth. 4th. In an oil stove, the combination, with the body $A$, of
the chimney-supporting plate $M$ located at the bottom of the comthe chimney-supporting piate $M$ located at the bottom of the combustion chamber, deflector supporting bracket $R$ affixed to said plate
$M$, deflector $P$ affixed to said bracket $R$ above the lamp $C$ within the M, defiector Pafixed to said bracket $R$ above the lamp $C$ with

## No. 27,102. Draught Hook for Vehicles.

(Crochet de tirage de voiture.)
George Heon, Resto O. Wood and Julir B. Wood, Manchester, N.H., U.S., 2nd July, 1887; 5 years.

Claim.-1st. The combination of draw-bar D, nut E, spring $C$, tube A and T-brace, substantially as herein desoribed and set forth. 2nd. The combination of draw-bar D, nut E, spring C, tube A and T-brace,
with the thills and cross-bar of a vehicle, in the manner and for the With the thills and cross-bar of a vehicle, in
purposes substantially as herein described.

## No. 27,103. Clothes Pin. (Epingle d'Etendage.)

William H. Johnson, Onslow C. Mann and George E. Marvine, Delhi, N.Y., U.S., 2nd July, 1887; 5 years.

Claim.-A clothes-pin formed of a single piece of metal, bent apon itself to form two substantially parallel arms, one of which is bifurcated and said arms bent to form hooks and springs to engage the line and hold the said pin in place thereon, substantially as shown and described.

## No. 27,104. Torsion Spring for Vehicles. (Ressort de voiture.)

Benjamin D. Shaw, Beverly Ohio, and A. W. Hayward, Chicago, Ill., U.S., 2nd July, 1887 ; 5 years.

Claim.-1st. The combination, with the axle, of the cross-bars $D$, Dr and the springs E. $E$, all connected together and adrpted to operate in the manner described. 2nd. In a vehicle torsion-spring, the link 10 made movable along the arms 11 and l2, from 13 to 4 to regulate the length and stiffuess of the spring, as set forth.
No. 27,105. Flower Pot. ( $P_{o t}$ a fleurs.)
James W. Black, Berwick, N,S., 2nd July, 1887; 5 years.
Claim.-A flower-pot with the combination of the clips or attachment C, the holes or rings $d, d, d$, and the bracket or rings $\mathrm{E}, \mathrm{E}$, substantially as and for the purpose hereinbefore set forth.

## No. 27,106. Wire Fence. (Clôture en fil defer.)

John G. Sohiller, Youngstown, Ohio, U.S., 2nd July, 1887: 5 years.
Claim.-1st. A joint securing plate for the vertical and horizontal Wires, of a wire fence consisting of a metal plate having a diametric semi-cylindrical groove extending from edge to edge thereof, and an
elongated diametric slot across-section, said groove at the centre of elongated diametric slot across-section, said groove at the centre of
the plate, the outer ends of the slot and the inner ends of the two the plate, the outer ends of the slot and the inner ends of the two
parts of the groove (at the points it meets the slot) being chanfered or inclined, as set forth. 2nd. In combination, a plate harving on one face, a diametric semi-cylindrical groove extending from edge to edge, and an elongated slot crossing said groove at the centre, a wire provided with a V-shaped or curved bend projected through said slot, and another wire laid in said groove and passed through the
apex of said bend, substantially as set forth. 3rd. A wire fence conapex of said bend, substantially as set forth. 3rd. A wire fence con-
sisting of suitable posts, horizontal and vertical wires and jointplates, the joints of said fence each consisting of a plate having sn elongated diametric slot having chamfered or inclined outer ends, and a diametric semi-cylindrical groove crossing said slots and chamfered at the crossing, a vertical wire having a bend thrust through said chamfered slot and a borizontal wire laidin said groove and passed through said bend, as set forth.
No. 27,107. Fan Motor for Rocking Chairs.
Moîse Marooux, St. Eugène de Grantham, Que., 2nd July, 1887; 5
Claim.-1st. An adjustable rocking-chair fan motor secured to the rocker of the chair, and operating a swinging fan by means of the
levers, geared segments, standard cord, pulley and spring, as berein levers, geared segments, standard cord, pulley and spring, as berein
shown and described. 2nd. In a rocking-chair fan motor, the levers shown rind described. 2nd. In a rocking-chair fan motor, the levers
$G$ and $H$ fulcrumed on the bow $E$, and having the geared segments $i$ and $j$ arranged to operate the fan A through the cord $l$, pulley C, and spring $m$, substantially as herein shown and described. 3rd. In a rocking-chair fan motor, the combination of the bow E secured to the chair rocker by the set set-screw $f$, with the levers $G$ and $H$ fulcrumed on it, and provided with the geared gegments $i$. and $j$, the wheel $k$, cord $l$, standard $D$, spring $m$, pulley $C$ and fan A, substantially as herein shown and described.
No. $\mathbf{2 7} 7,108$, Pencil Sharpener. (Taille-Crayon.)
Charles E. Gould and Frank H. Cook, Leominster, Mass., U.S., 2nd July, 1887; 5 years.
Claim.-1st. In a pencil sharpener, a disk provided with an abrading surface, a cluck pivoted to swing at right angles to the plane of
said disk and a cranked miter gear engaging gears on said parts, said disk and a cranked miter gear engaging gears on said parts,
whereby they are simultaneously rotated iumpoosite directions. 2nd. Whereby they are simultaneously rotated in opposite directions. 2nd. In a pencil-sharpener, a disk provided with an abrading surface, a
chuck pivoted on the framo at a point beyond the edge of the disk, chuck pivoted on the framo at a point beyond the edge of the disk,
and forward of the plane thereof, and adapted to swing in a plane at
right angles to the plane of said disk and a cranked miter gear engaging gears on said parts, whereby they are simultaneously rotated in opposite directions. 3rd. In a pencil sharpener, the combination of the disk $H$, said paper $F$ covering the surface thereof, a plate $R$ disposed over the center of said sheet of sand paper, and a screw $i$ posed over the center of said sheet of sand paper, and a screw
passing through said plate and clamping said paper Fat the center of passing through said plate and clamping said paper F at the center of
of the disk H. 4th In a pencil-sharpener, the combination, with a of the disk $H$. 4th In a pencil-sharpener, the combination, with a
cranked miter-gear $Q$, of a shaft $E$ provided with an abrading-disk cranked miter-gear $Q$, of a shaft $E$ provided with an abrading-disk
$H$, a pinion $J$ conneoted to said shaft and meshing with the miter $Q$, H , a pinion J connected to said shaft and meshing with the miter $Q$,
a swinging stock $M$, and a clutch 0 working therein and provided with a pinion $Y$ meshing with said miter gear $Q$. 5 th. In a pencil sharpener, a chuck for holding the pencil provided with the rods $v, f$, plates $w$ and elastic band $a$, substantially as and for the purpose specified. 6 th. In a pencil-sharpener, the chuck 0 having the oap $P$ and end T , and provided with the rods $v, f$, plates 20 and elastio band a, combined and arranged to operate substantially as set forth. 7th. In a pencil-sharpener, the plates $w$ having the faring ends $d$, in combination with the rods $v$, elastic band $a$ and body of the chuck 0 , substantially as set forth. 8th. The improved pencil sharpener herein described, the same consisting of the body B having the brackets $\mathbf{C}, \mathbf{K}$, the journaled gear $Q$ provided with the crank $l$, the chuck 0 provided with the pinion $Y$, the disk $H$ provided with the paper $F$, clamp $R$ and screw $i$, the shaft $E$ provided with the pinion $J$ and the pivoted stock $M$ provided with the handle $m$, combined and arranged to operate substantially as described.

No. 27,109. Manuel Power. (Force ad bras.)
Jasper Bates, Thornbury, Ont., 2nd July, 1887; 5 years.
Claim.-1st. The combination, with the base $A$ and lever G, of the toggle lever I, posts $J, J$, connecting rod $K$ and lever $M$, as set forth. 2nd. The curved lever S, fulcrumed between posts J, J at the jointure of the toggle levers $G I$, and provided with a rigid handle $W$, as set forth.

## No. 27,110. Fifth-Wheel for Vehicles. <br> (Rond davaut-train de voiture.)

Robert MoLaughlin, Oshawa, Ont., 2nd July, 1887 ; 5 years.
Claim.-1st. A fifth-wheel having an upper wear-iron notohed to receive the under reach-iron, in combination with the under weariron, the layer or layers of rubber or other yielding material and pressure-plate, the whole being adjusted by a set screw working in a wheel having an upper wear-iron notched to receive the under reach iron, in combination with the under wear iron-having two lips or flanges formed on each side of the circle, the layer or layers of rubber or other yielding material and pressure-plate, the whole being adjusted by a set-serew working in a bracket, substantially as and for the purpose specified. 3rd. A fifth-wheel having an upper weariron notched to receive the under reach-iron, in combination with the under wear-iron having pins projecting through a layer or layers of
rubber or other yielding material, and a pressure-plate, the whole rubber or other yielding material, and a pressure-plate, the whole being held together adjustably, substantially as and for the purpose
specified. 4th. The under wear-iron a having the lips $e$, and the pins specified. 4 th. The under wear-irou a having the lips e, and the pins
$f$ formed on it, substantially as and for the purpose specified. 5th. The combination, with the fifth-wheel $P$ and the reach, of the wearThe combination, with the fifth-wheel $P$ and the reach, of the wear-
iron $h$ on said fifth-wheel, and recessed to receive said reach, the wear iron $h$ on said fifth-wheel, and recessed to receive said reach, the wear
iron a having lips $e$ to embrace and guide the fifth-wheel, and opposron a haring lips $e$ to embrace and guide the fifth-wheel, and oppos-
itely-extending pins $f$, the pressure-plate $K$ sleeved on said pins the itely-extending pins $f$, the pressure-plate $K$ sleeved on said pins the
layer or layers of rubber $S$ between the plate $K$ and wear iron a and through which pins $f$ pass, the bracket $i$ embracing said wear-irons, pressure-plate and rubber and the set-screw $n$ passed through said
bracket and bearing on the pressure plate,substantially as shown and bracket and bearing on the pressure plate
described and for the purpose specified.
No. 27,111. Car-Coupler. (Attelage de Chars.)
Eusébe Lalime, Malone, N.Y., U.S., 2nd July, 1887 ; 5 years.
Claim,-1st. The combination, with a draw-head formed with an upwardly extending hooked prong, of a swinging hook, a sleeve formed with a lever-arm and an inwardly-projecting feather, a link oon-
necting the hook with the lever-arm of the sleeve, a cross-bar formed necting the hook with the lever-arm of the sleeve, a oross-bar formed
with a bit that is arranged within the sleeve and lever arms connectWith a bit that is arranged within the sleeve and lever arms connect-
ed to the cross bar, substantially as described. 2nd. The combination with a draw-head formed with an upwardly and rearwardly extending hook or prong, and a forwardly-extending prong 19, of a hook formed with a point 21 , a spur 22 and a shoulder 32 , a sleeve having a lever 23 and an inwardly-extending feather 30 , a link connecting the hook 20 with the lever 23 , a bar 26 provided with lever-arms 31 and a bit 29 , substantially as described.
No. 27,112. Button Fastener. (Queue de bouton.) Eleazar Kempshall, New Britain, Conn., U.S., 2nd July, 1887 ; 5 years. Claim.-A sheet-metal button fastener, consisting of a narrow head or base having an edgewise bearing surface, and having an integral punctruing prong projecting from said bearing surface, at a Doint to one side of the center of said surface, and in the same plane portion to be bended over to form a button holding loop or hook, and portion to be bended over to form a button holding loop or hook, and having at its apex a short lateral curve or bend projecting over the
lower end of said head or base, and coinciding in shape with the curve of the finished loop or hook, the whole being adapted to be struck from a sheet of metal in its finished form, all substantially as described and for the purpose specifled.

## No. 27,113. Calculating Machine. (Machine a Calculer.)

Frederick L. Bancroft, St. Paul, Minn., U.S., 2nd July, 1887 ; 5 years. Claim.-1st. In a calculating machine, the excentric cam D , offel $o$, collar F, set screw a, combined with the pall $G$, pivot $g$, arm K,
spring L , pin $b$, lever I , pivot $f$, spring $M$, pine and pin $\in \mathrm{I}$, all arrangspring $L$, pin $b$, lever I, pivot $f$, spring $M$, pin $e$ and pin $\in 1$, all arrang-
ed and operating as set forth and described. 2nd. In a calculating

