ing bar, substantially as and for the purpose set forth. 2nd. In a lock, a series of reversible tumblers, having one end journaled in a frame, and the other end with a notch at one side, the centre of its end face, said tumblers adapted to be rocked to bring the notches in alignment to receive an oscillating bar, substantially as and for the purpose set forth. 3rd. The combination, with a rectangular frame or bracket having a cross bar or floor therein, of a series of rocking tumblers journalled at one end in the frame, the other end resting on its floor, said tumblers having notches in one end adapted to register and receive an oscillating bar, substantially as and for the purpose set forth. 4th. In a lock frame, a series of reversible tumblers journalled at one end therein, the other end having a notch at one side, the centre of the space with one inwardly inclined wall part, of the tumblers arranged on the journal with the notches below the centre, and adapted to be rocked to bring all the notches in line with the inclined wall of the rocked tumblers, on the same plane with the straight walls of the notches, of the stationary tumblers arranged with notches above the centre, and to receive an oscillating bar in said notches, as set forth. 5th. The combination, with a lock frame or bracket, composed of a side or securing plate and open slotted end plate extending from one end of the securing plate, having an arm at right angles thereto, and a closed slotted end plate on the other end of the securing plate, of the bar pivoted on the right angled arm, and working in the slots of the plates, and adapted to take into notches in rocking tumblers journalled in the bracket, substantially as and for the purpose set forth. 6th. The combination, with a lock frame or bracket, having slotted end pieces with a cross bar between them, and an arm at right angles from one of the said pieces having the end of a bar pivoted thereon that oscillated in the slots and in notches of the rocking tumblers journalled in the frame, of a sleeve on the other end piece provided with a spring actuating locking bolt, said bolt being connected with the free end of the bar by a link limiting the movement of the bolt, substantially as and for the purpose set forth. 7th. The combination, with a desk, having a lock frame or bracket secured on its inner side, with a series of end notched rock tumblers journalled within one side of the frame, and an oscillating pivoted bar on the other side of the frame working in the notches of the tumblers, and having its free end connected with a vertical locking bolt, of a series of spring push buttons on the side of the desk for rocking the tumblers, and a push button on the top of the desk for operating the locking bolt, substantially as and for the purpose set forth. 8th. The combination in a lock frame, with a series of rocking tumblers, having notches in their ends adapted to register and to receive a pivoted oscillating bar of one of the end plates, of the frame reinforced at one end with a cutaway sleeve therein, having a vertical locking bolt recessed in its side, and a link pivoted in said recess, and to the free end of the oscillating bar, substantially as and for the purpose set forth. 9th. The combination, with a desk, having a lock frame secured on its inner side with reversible rocking tumblers therein, having notched ends receiving an oscillating bar, the free end of the bar connected with a vertical bolt in the end plate of the frame, of a shoe secured to the floor of the desk having a pivoted spring lever therein, and underneath said bolt, one end of said lever connected with a bolt extending through the floor, and adapted to take into the edge of a spring actuated drawer beneath, substantially as and for the purpose set forth. 10th. The combination, with a desk, having a reversible tumbler lock mechanism connected with a vertical bolt, of a shoe beneath the bolt having side plates at one end with a lever pivoted between them, one of said plates, having a semi-circular recess, a locking bolt in said recess extending through a sleeve beneath the shoe, the upper part of the locking bolt having a notch therein, to receive one end of the lever, and the other end supported by a spring beneath the vertical bolt of the lock, as set forth. 11th. The combination of the lever 11, pivotally connected to the side bars 3, the pawl carrying lever 14, having a dog 16, the V-shaped lever 21, pivotally connected to the lower end of the lever 11, the ratchet wheel 10, rigidly secured to one end of the winding drum 8, and stud pin 36, rigidly secured to the side of the drawer B, substantially as and for the purpose set forth. 12th. The combination of the lever 11, pivotally connected to the side bar 3, the pawl carrying lever 14, having a dog 16, formed on the outer end thereof, the V-shaped lever 21, pivotally connected to the outwardly extending foot 17, of the lever 11, the ratchet wheel 10, rigidly secured to one end of the winding drum 8, and eye plate 29, extending outwardly from the leg 4, and the set screw 30, substantially as and for the purpose set forth. 13th. The combination of the lever 11, pivotally connected to the side bar 3, the pawl carrying lever 14, having a dog 16, formed on the outer end thereof, the ratchet wheel 10, rigidly secured to the drum, the V-shaped lever 21, consisting of an arm 22, having formed in the end opposite the hub 20, a sleeve 23, through which passes a set screw 24, and an arm 25, in which is formed a notch 26, and its outer end turned upwards to form a block 27, with the leg 28, the eye plate 29, and set screw 30, substantially as and for the purpose set forth. 14th. The combination of the lever 11, pivotally connected to the side bar 3, the pawl carrying lever 14, having a dog 16, formed on the outer end thereof, the V-shaped lever 21, pivotally connected to the outwardly extending foot 17, of the lever 11, the ratchet wheel 10, rigidly secured to the winding drum 8, the T-lever 31, pivotally connected to the side bar 3, between the ratchet wheel 10, and the table 5, the spring pawl 33, one end of which is secured to the key-lever 31, and the other shaped to fit the face and side face of the ratchet teeth, the V-shaped lever 21, pivotally connected to the end of the outwardly extending foot 17, of the lever 11, the eye plate 29, and set screw 30, substantially as and for the purpose set forth. 15th. The combination of the lever 11, pivotally connected to the side bar 3, the pawl carrying lever 14, having a dog 16, formed on the outer end thereof, the ratchet wheel 10, rigidly secured to the drum 8, the V-shaped lever 21, pivotally connected to the outwardly extending foot 17, of the lever 11, and consisting of an arm 22, having formed in the end thereof, opposite hub 20, a sleeve 23, through which passes a set screw 24, and an arm 25, in which is formed a notch 26, and its outer end turned upwards to form a block 27, with the leg 28, secured to and extending outwards from the lower end of the lever 11, and engaging with the block 27, formed on the end of the arm 25, to the eye plate 29, extending outward from the leg 3, and set screw 30, substantially as and for the purpose set forth.

No. 35,206. Medicinal Compound.

(Composition médicale.)

Daniel Whalen, Fort William West, Ontario, Canada, 13th October, 1890; 5 years.

Claim.—A compound, composed of the ingredients aforesaid, mixed together, substantially in the manner and proportions aforesaid, and for the purposes set forth.

No. 35,207. Metal Cutter.

(Appareil pour couper le métal.)

William Smith, (assignee of Albert Corry Irvine), Boston, Massachusetts, U.S.A., 13th October, 1890; 5 years.

Claim.—1st. The combination and arrangement of the standard-plate, the lever, and the lower blade bar, with the upper blade bar divided into two arms at its left hand end, said arms passing respectively on each side of a projection from the lower blade bar, and the standard-plate, all constructed and arranged, substantially as shown and described. 2nd. The combination and arrangement of the two blade bars with their respective blades and the standard or supporting plate, and the working lever provided with segmental gear carrying round-top cogs, and the corresponding segmental gear on the lower blade bar, all constructed and arranged substantially as shown and described.

No. 35,208. Method and Apparatus for Sizing and Separating Ores, etc.

(Mode et appareil pour assortir et séparer les minerais, etc.)

Richard Stanfield, Edinburgh, Scotland, and Thomas Clarkson, London, England, 15th October, 1890; 5 years.

Claim.—1st. The hereinbefore described method of separating metals, minerals and other dense bodies from their ores, or associated materials, or of classifying materials according to size, consisting in the use of a rapidly rotated vessel, having apertures in its periphery, substantially as set forth. 2nd. The method of separating gold or silver from ores, consisting in first adding to the pulverized materials a heavy substance such as mercury, and then subjecting the whole to the action of a rapidly rotated vessel with apertures in its periphery, whereby separation will be assisted, as set forth. 3rd. The use for the purposes specified, of a centrifugal machine provided with a rotary vessel such as A, for the reception of pulverized material, with one or more rows of specially constructed apertures or tubular arms around its periphery for the ejection thereof, and operated, substantially as hereinabove set forth. 4th. In a centrifugal machine for the purposes hereinbefore specified, a vessel A, made in two parts the upper part a^1, detachably fitted to the lower part a^2, which forms the head of a rotating spindle B, to facilitate the attachment of duplicate vessels suitable for the particular material to be operated upon, and having apertures a, a, constructed and arranged, substantially as hereinbefore described. 5th. In a centrifugal machine, for the purposes hereinbefore specified, the combination, with a rotary vessel A, provided with apertures a, and rotated by a shaft B, of an enclosing cover J, having arms O, carrying brushes P, all arranged and operated, substantially as and for the purposes hereinbefore specified, and shown in the accompanying drawings. 6th. The combination, with a centrifugal machine, constructed substantially in the manner specified, of a receiver such as Q, having any convenient number of concentric receiving compartments disposed, constructed, and arranged substantially as and for the purposes hereinbefore described, and shown in the accompanying drawings. 7th. In apparatus for the purpose set forth, the provision, in combination, with a centrifugal machine, and a receiver disposed as specified, of a suction fan or blower for causing an air current intermediate between the centrifugal machine and the said receiver, substantially as and for the purpose set forth. 8th. An apparatus for separating metals, minerals and other dense bodies from ores or associated materials, and collecting same according to their weights or size, consisting essentially of a centrifugal machine constructed and operated, substantially as stated, a receiver surrounding same, and divided into concentric compartments with discharge orifices, and swept by rotating brushes or scrapers, the said apparatus having a receptacle for waste provided with means for removing same, and being combined or not with a fan or blower, the whole constructed arranged and operating, substantially in the manner, and on the principle hereinabove described and illustrated.

No. 35,209. Car Wheel. *(Roue de char.)*

James Rigby, Minneapolis, Minnesota, U.S.A., 15th October, 1890; 5 years.

Claim.—1st. In combination, with a car wheel body, a tire formed with annular ledges upon its inner periphery, and near its outer and inner faces for receiving the body, and having a continuous or uncut annular flange projecting from its inner face, and adapted to be hammered down over the body for holding it in place, as described. 2nd. In a car wheel, the tire formed with annular steps or ledges on its inner periphery, and having grooves cut in such ledges, and with a continuous or uncut annular flange projecting from its face, in combination, with the body, having a smooth-faced flange k, and provided with annular projecting beads a, f, adapted to fit in the grooves of the tire and interlock, said flange of the tire being adapted to be hammered down all around over the body to hold it in place substantially as described. 3rd. The method of securing together the body and tire of a car wheel, which consists, in placing the body within the tire, and forcing it against a flange or ledge projecting inward from the inner periphery at or near one face, heating a flange on the other face of the tire to the working temperature, and, after the body is in position, turning such flange inward and hammering