No. 32,406. Hoe. (Houe.)

Elnathan J. Gates, Rochester, N. Y., U.S., 2nd October, 1889; 5

Claim.—1st. A hoe consisting of a blade having a long straight, or slightly curved, bottom cutting edge, and side edges curving inward-ly upwardly from at or near the bottem to a central integral shank, the height of the blade being about two-thirds of its width, the blade so constructed being narrow both laterally and vertically: in combination with a shank integral with the blade, which shank terminates in a neck and tang adapted to enter a handle, substantially as described.

No. 32,407. Air Brake Signal.

(Signal de frein atmosphérique.)

Allen B. Collins, Burlington, Iowa, U.S., 2nd October, 1889; 5 years. Claim.—1st. In an air brake signal, the combination of the main air pipe running lengthwise of the train beneath the cars, cocks for closing such pipe, and whistles attached to the cocks, and adapted to be blown when the cocks are turned to close the main air pipe, substantially as described. 2nd. In an air brake signal, the combination of the main air pipe provided with cocks for closing the same, a branch pipe connecting with the main pipe, and provided with swith, and a valve for opening and closing the pipe, and a spring lever connected with the handle of one of the cocks in the main rippe and moved thereby to open and close the valve in the main rippe, substantially as described. 3rd. In an air brake signal, the combination of the main air pipe provided with cocks for closing the same, a branch pipe connected with the hanin air pipe and provided with a whistle and a valve, whereby the pipe is opened and closed, and a slotted spring lever attached to the handle of one of the cocks in the main pipe, and moved thereby in one direction to open the valve in the branch pipe, and moved in the other direction by means of a spring to close such valve, substantially as described. Allen B. Collins, Burlington, Iowa, U.S., 2nd October, 1889; 5 years.

No. 32,408. Band Cutter Platform for Thrashing Machines. (Plateforme de coupe-hart pour machines à battre.)

Alfred B. Leeper, Owaneco, Ill., U.S., 2nd October, 1889; 5 years.

Claim.—An improved platform for attachment to the wheeled truck of a thrashing machine, the same consisting of the flat body having near one end a concavity adapted to fit the rim of a wheel, the hook-shaped clamping-bolt applied to such recessed end of the body, and a brace-bar hinged to the underside of said body near its outer end, substantially as shown and described.

No. 32,409. Mill for Grinding and Sheeting Rubber. (Moulin pour polir et étendre le caoutchouc.)

Nathaniel C. Mitchell, Philadelphia, Penn., U.S., 2nd October, 1889; 5 years.

"laim.—1st. In a rubber grinding or sheeting mill, the combination, Claim.—1st. In a rubber grinding or sheeting mill, the combination, with the rolls, of guides for conducting the rubber sheet around one of said rolls out of contact therewith, substantially as described. 2nd. The combination, with the grinding and sheeting rolls, of guiding devices for conducting the rubber sheet around one of said rolls, said guiding devices comprising rollers placed respectively above and beneath the nip of the rolls, and a curved smooth-surface sheet behind one of said rolls, substantially as described. 3rd. The combination of the grinding and sheeting rolls, the guides arranged around one of said rolls, and the doctor-blade for guiding the sheet over the first of said guides, substantially as described.

No. 32,410. Apparatus for Washing and Separating Rubber from foreign Substances. (Appareil pour laver le caoutchouc et le séparer des corps étrangers.)

Nathaniel C. Mitchell, Philadelphia, Penn., U.S., 2nd October, 1889; 5 years

Nathaniel C. Mitchell, Philadelphia, Penn., U.S., 2nd October, 1889; 5 years.

Claim.— 1st. The combination, with the separator having a diaphragm partially dividing the same, of a rubber-feeding device and water-supply pipe on one side of said diaphragm, and an overflow pipe on the other side thereof, substantially as described. 2nd. The combination, with the separator, having a diaphragm extending part way down the same, of rubber-feeding devices, and a main water-pipe on one side of said diaphragm, an overflow-pipe on the other side of said diaphragm, and a smaller water-pipe discharging into said separator below the diaphragm, and at the side opposite said overflow-pipe, substantially as described. 3rd. In a rubber-cleansing apparatus, the combination, of the separator, the rubber-feeding device, the water-pipe discharging into said separator, the overflow-pipe for the rubber, the return water-passage, and the pump for maintaining a constant circulation of water through the separator, substantially as described. 4th. The combination, with the separator feeding device, and water-supply pipe, of the overflow pipe, a screen for receiving the matters discharged by said pipe, and the return water-passage under said screen, substantially as described. 5th. The combination, of the separator, the water-supply pipe therefor, the excreen onto which said overflow discharges, and the return-passage leading from beneath said screen to said reservoir, said return-passage leading from beneath said screen to said reservoir, said return-passage leading from beneath said screen to said reservoir, said return-passage leading from beneath said screen to said reservoir, said return-passage leading from beneath said screen to said reservoir, said return-passage leading from beneath said screen to said reservoir, said return-passage bening proviced with means for purifying the water, substantially as described. 6th. In a rubber cleansing apparatus, the combination, with rubber-feeding mechanism and a water-supply, of a separator

mechanism, a main water-pipe discharging downward on the same side as the feeding mechanism, and a small water-pipe discharging into said vessel near the bottom thereof and in the direction of the overflow, substantially as described

No. 32,411. Coffee Surrogate. (Café au lait.)

Albert W. Rehnstrom, Malhammer, Sweden, 2nd October, 1889; 5

years. Claim—lst. Mode of preparing a coffee-surrogate by evaporating whey alone, or whey mixed with milk, or milk alone, to a mouldable mass, shaping this mass into suitable pieces, and after being dried roasting the same, either alone, or together with coffee beans. 2nd. A coffee-surrogate prepared by means of evaporating whey alone, or whey mixed with milk, or milk alone, to a mouldable mass, which is afterwards shaped into suitable pieces, and, after being dried, roasted either alone or together with coffee beans, with the view that this roasted material may be used as a coffee-surrogate alone by itself, or together with roasted coffee.

No. 32,412. Cough Syrup. (Sirop pour la toux.)

Francis M. Jacques, New London, Conn., U. S., 2nd October, 1889; 5 years.

Claim.—The herein described cough syrup, consisting of rock polypody, licorice, wild cherry bark, hearhound herb, rock candy, granulated sugar, glycerine and rye whisky, in the proportions specified.

No. 32,413. Manifold Shipping Book.

(Livre varié de chargement.)

Hugo Loewenbach, Milwaukee, Wis., U. S., 2nd October, 1889; 5

years.

Claim.—1st. A manifold shipping book, consisting of a series of blank leaves of thin paper extending the entire width of the book, having between them one or more other blank leaves of similar material of less width than the first-named leaves. 2nd. In a manifold shipping book, the combination of series of permanent and detachable leaves bound together, each of the former having a portion of its edge cut off or out, so as to expose part of the leaf below. 3rd. A manifold shipping book, consisting of alternate permanent and detachable leaves, the latter being of greater width than the former, and provided with a vertical line of perforations adjacent to the sub of each detachable leaf, which latter are adapted to be folded over the permanent leaves, and interposed pieces of carbon transfer paper, for the purpose of making manifold entries at one and the same time.

No. 32,414. Signalling Lantern.

(Fanal à signaux.)

John W. Hayward, Saint John, N.F.L., 2nd October, 1889; 5 years.

Claim.—1st. The combination, with a lantern, provided with condensing and focusing lenses, of stencils and a stencil-operating mechanism, substantially as described. 2nd. The combination, with a lantern, provided with condensing and focusing lenses, of a stencil and a means for throwing said stencil into position between the lenses, substantially as described. 3rd. The combination, with a lantern, provided with condensing and focusing lenses, of stencil plates and a means for operating such plates, substantially as described. 4th. The combination, with a lantern provided with condensing and focusing lenses, of stencil plates, substantially as described. 4th. The combination, with a lantern provided with condensing and focusing lenses, of stencil plates, substantially as described. 5th. The combination, with a lantern, provided with condensing and focusing lenses, of stencil plates, springs arranged in connection with said plates, operating keys and connections between the keys and the plates, substantially as described. 5th. The combination with a lantern, provided with condensing lenses, of pivotally mounted stencil plates, spring supported bars, against which the extending ends of the plates bear, operating keys and connections between the keys and the plates, substantially as described. 7th. The combination, with a lantern, provided with condensing and focusing lenses, of stencil plates, a stencil plates, a stencil plates, a stencil plates, substantially as described. Claim.-1st. The combination, with a lantern, provided with con-

No. 32,415. Nut Making Machine.

(Machine à faire les écrous.)

George Dunham, Unionville, Conn., U.S., 2nd October, 1889; 5 years

George Dunham, Unionville, Conn., U.S., 2nd October, 1889; 5 years. Claim.—1st. In a nut machine, the slide A having its lower end adapted to hold several punches, and made separately from the main or upper portion of said slide, and provided with adjusting devices for adjusting the punches bodily to or from the front and rear, and also laterally, substantially as described and for the purpose specified. 2nd. In a nut machine, having a groove or way for the rod or bar to pass through, the combination of the jaws c., c, pivoted to the plate E upon each side of said way, and the spring d for pressing said jaws against opposite sides of the bar, when passing through said ways, substantially as described and for the purpose specified. 3rd. In a nut machine, the combination of the blanking punch and dies, one member of said dies being formed on the reciprocating carrier, and the stationary wing b beveled at its outer end, substantially as described. whereby the movement of said carrier under said wing frees the dies from sorap, as set forth. 4th. In a nut machine, the combination, with the blanking punch, of the shear blade 4, and the reciprocating carrier, having an edge parallel to that of said shear blade, and in connection therewith, serving as the blanking die, said parallel edge having also the holding recess f, substantially as described and for the purpose specified. 5th. In a nut machine, the combination of the blanking punch and die, the trimming die and punch, a carrier for transferring the blank from the blanking to the