# No. 29,774. Trotting Harness.

(Harnais de course.)

John H. Whitaker, Davenport, Iowa, U.S., 29th August, 1888; 5 years.

years.

Claim.—1st. The loose collar or shackle for a horse's hind leg, combined with a yielding connection with the shafts, arranged as described, to adapt itself to the stride of the horse, substantially as and for the purpose described. 2nd. The collar or shackle for a horse's hind leg, combined with a supporting strap connecting with the same, and a shaft connection arranged to adapt itself to the stride of the horse, substantially as and for the purpose described. 3rd. The combination of the collar or shackle A, the flexible connection b, rod d attached longitudinally to the shaft, and a sleeve c sliding thereon and attached to the flexible connection b, substantially as and for the purpose described.

# No. 29,775. Toy. (Jouet.)

Orlando P. Briggs, Chicago, Ill., U.S., 29th August, 1888; 5 years.

Orlando P. Briggs, Chicago, Ill., U.S., 29th August, 1888; 5 years.

Claim—1st. A top-spinning apparatus comprising a frame, a longitudinally movable rod, a spring for actuating the rod, a detent for holding the spring compressed, and yielding bar opposing said rod adapted to hold the cylindric spindle of the top in engagement with tho rod when the latter is moved endwise, substantially as described.

2nd. A top-spinning device comprising a longitudinally movable rod provided with rack teeth, a spring for moving said rod, a detent and trigger engaging the rod for holding the spring compressed and releasing the same, and a spring presser but opposite the rack-bar and adapted to hold the toothed spindle of a top in engagement therewith, substantially as described. 3rd. The herein described by having the form of a gun or pistol provided with a barrel, and a longitudinally movable rod therein, a spring for actuating the rod, a detent and spring aims at the end of the barrel provided with holders at their free ends to receive and hold a bail or marble, substantially as described.

#### No. 29,776. Grinding Machine for Frame (Machine à affater les scies en Saws. groupe.)

Hoslt and Fleisher, Christiana, Norway, (assignees of Gustave Carlsen, Ulcaborg, Findland), 30th August, 1889; 5 years.

claim.—A transportable grinding machine for frame saws, consisting of an emery wheel mounted on the end of a lever, which may be swung horizontally and vertically, and which lever is attached to a horizontally swinging arm pivoted to one end of a horizontal carrier rod, which may be adjusted vertically and horizontally on a stand adapted to be bolted or otherwise secured to the floor, substantially as herein described.

#### No. 29,777. Carriage Speaking Tube.

(Ports-voix de voiture)

Edwin E. Wise, (assignee of George A. Beach), Chicago, Ill., U. S., 30th August, 1888; 5 years.

Edwin E. Wise, (assignee of George A. Beach), Chicago, Ill., U. S.. 30th August, 1888; 5 years.

Claim—Ist. The carriage speaking tube extending from the driver's seat of the carriage to the interior of the carriage body, and consisting in the combination, with a stationary rubber hose guide tube section B. and furnished with a mouth piece C fitting in a suitable section B. and furnished with a mouth piece C fitting in a suitable socket on the carriage within reach of the driver's seat, and rubber hose section if furnished with a mouth piece G1, substantially as specified. 2nd. The carriage speaking tube extending from the driver's seat of the carriage to the interior of the carriage body through the boot of the carriage, and consisting in the combination, with a stationary rubber hose section B. of the shiding rubber hose section D telescoping within said section B, and furnished with a mouth piece C fitting in a suitable socket on the carriage within reach of the driver's seat, said mouth piece C having a hinged cover F furnished with double disk whistle, and rubber hose section G furnished with a mouth piece G1, substantially as specified. 3rd. The combination, with a rigid or non-folding closed carriage body, of a telescoping or sliding speaking tube B D G having mouth pieces C, G1, the stationary tube or guide B communicating with a hole or opening through the carriage body, and the carriage body being provided with a socket to receive and conceal said mouth piece C, and tube D shiding or telescoping entirely within the carriage body being provided with a socket to receive and conceal said mouth piece C, and tube D shiding or telescoping entirely within the carriage body A, stationary tube B having a thimble bit at its outer end, said tube B bong secured at the top of the carriage under the upholstery, and provided with an elbow E at its inner end, sliding tube D provided with a mouth piece C at its outer end, said cuber with a socket to receive said mouth piece, dependent tube G secured to said clhow and

and arms  $h^2$ ,  $h^2$  and  $h^3$ ,  $h^3$  standing in planes at about right angles to each other, and connected by spring coils  $h^4$ ,  $h^4$ , substantially as specified. 8th The combination, with a speaking tube, of a wire spring clamp H having hinge h,  $h^4$ , and  $h^2$ ,  $h^2$ , claimp arms  $h_3$ ,  $h^4$  connected at an angle to said arms  $h^2$ ,  $h^2$  by spring coils  $h^4$ ,  $h^4$ , said clamp arms  $h_3$ ,  $h^3$  having coiled or curved ends  $h^4$ ,  $h^4$ , substantially as specified. 9th, In a carriage speaking tube, the combination, with a speaking tube, its mouth piece or bell Cfurnished with an unner sleeve Cr and an outer sleeve Cr, said sleeves Cr, Cr forming an annular chamber between them to fit and recover the end of the speaking tube, substantially as specified. 10th. In a carriage speaking tube, the combination, with a speaking tube, its mouth piece or bell C having shoulder or rim c, furnished with an interned flange or rim cr, and a hinged cover F having a flange f adapted to fit over said rim c and provided with a central whistle perforation, and a second perforated disk inside said cap disk and forming with said cap disk a whistle, substantially as specified.

# No. 29,778. Stop Valve. (Soupape de relenue.)

John A. Creelman and George H. Graham, Rochester, N. Y., U. S., 30th August, 1888; 5 years.

30th August, 1888; 5 years.

Claim.—1st. A globe and valve therein, in combination with a capfor the globe, a stem in the cap, a handle secured to the stem, a diaphragm, a stud rigid with the diaphragm operated by the handle, and a connecting bar or lover within the globe for said stad and valve, substantially as shown and described. 2nd. A globe and valve therein, in combination with a cap for the globe, a stem held by the cap, a handle secured to the stem above the cap, a diaphragm within the cap, a stiffening disk for the diaphragm, a stud, or jaws rigid with the diaphragm and disk operated by the handle, and a lover within the globe to connect said stud and valve, substantially as shown and described. 3rd. A globe with its contained valve, in combination with a cap or cover for the globe, a threaded stem held in the cap, a studingly with the diaphragm of exited by the handle, a ring resting with in the globe beneath the simplificant, and a connecting lever for said stud and valve joined to said ring, as shown. 4th. A globe and valve, in combination with a cap for the globe, a stem held by the cap, a handle secured to the stem, a diaphragm, a stud rigid with the latter operated by the handle, and a connecting lever for said stud and valve, said lever being formed with a stop for the valve, substantially as and for the purpose set forth.

#### No. 29,779. Safety Valve. (Soupape de sûreté.)

Charles II. Payne and Hamilton S. Corvin, Toledo, Ohio, U. S., 30th August, 1888; 5 years.

August, 1888; 5 years.

Claim—1st. In a safety valve, in combination with the enclosing top of the steam space, a valve sent removably secured therein, as and for the purpose set forth. 2nd. In a safety valve, in combination with the valve seat, a valve formed with a lower face to fit the seat, and an upper face with an angular perforation for the insertion of a removable valve stem having a corresponding angular end portion, as and for the purpose set forth. 3rd. In a safety valve, in combination with a circular valve seat and valve, a valve stem connected at one end with the valve, and provided at the opposite end with an attachment for revolving the valve upon the seat, as and for the purpose set forth. 4th. In a safety valve, a valve seat, a valve seated thereon, a valve seat movably connected with the valve held to any desired pressure thereon by a lover, and an adjustable weight connected therewith, in combination, with a lever adapted to miss the valve stem from pressure upon the valve, as and for the purpose set forth. 5th. In a safety valve, a valve stem having one end attached to a valve, and provided at the opposite end with a bevel gear, a shaft journaled at right angles thereto having a bevel gear intermeshing with the gear upon the valve stem, and attachment for revolving the shaft, as and for the purpose set forth. shaft, as and for the purpose set forth.

### io. 29,780. Stove Damper. (Clé de tuyan.)

Barrett C. Oblinger, Independence, and Curtis E. Thomas, Kansas, Mo., U.S., 30th August, 1888, 5 years.

Mo., U.S., 30th August, 1888, 5 years.

Claim—1st. In a stove-pipe damper, a suitable frame, in combination with a main operating-plate having a central aperture and a suitable handle, and separate and independent deflecting-plates journaled upon opposite sides of said operating-plate, the latter having a diameter one half of which is greater than the distance between the plates, substantially as described. 2nd. In a stove-pipe damper, a suit able frame adapted to be removably located in the pipe at the junction of two sections, said frame being provided with lugs adapted to rest in the apertures in the pipe, in combination with plates independently nournaled in said frame, substantially as described. 3rd. In a stove-pipe damper, a suitable frame provided with bearings in its side-bars, in combination with plates separately and independently located in said trame, and provided with journals adapted to turn in said bearings, substantially as described. 4th. In a stove-pipe damper, a suitable frame, in combination with a series of separate and independent plates one of said plates having a diameter, one-half of which is greater than the distance between the plates, substantially as described. 5th than the distance between the plates, substantially as described. 5th In a store-pipe damper, a supporting frame adapted to removably fit in a store pipe, the side-bars of said frame being provided with oppositely-located angular apertures, in combination with two or more plates loosely mounted in said frame, and provided with angular journals which have their bearings in said angular apertures, substantially as described, 6th. The combination in a store-pipe damper, of the trame A. upper plate B, main plate C having central aperture bar extending across said aperture and handle h and lower plate D, substantially as described.

### No. 29,781. Spring Tooth Cultivator. (Scarificateur à dents élastiques.)

J. O. Wisner, Son & Co., (assignees of Wareham S. Wisner), Brantford, Ont., 30th August, 1883; 5 years.

Claim.—1st. A curved plate adjustably connected to the back of a