scribed, to oscillate said heads to and from each other, shaft T carrying the series of color-making rolls *t*, means, substantially as described, to intermittently rotate said shaft and heads, guides S and adjustable guides S1.

No. 18,771. Self-Closing Faucet.

(Robinet Fermant Automatiquement.)

Anton Prier, Charles Doherty and Pierce E. Everett, Kansas, Mo., U.S., 3rd March, 1884; 5 years.

Claim.—1st. A self-closing faucet, made up of a vertical pipe or body having an outlet, and valve seat located level with said outlet, a vertical valve stem and valve fitting said seat, a flexible compressible cushion and an actuating lever, substantially as and for the purpose set forth. 2nd. In a faucet, the combination, with the vertical pipe or body A1 having suitable outlet, and the valve seat, the valve and its stem, of the flange D having aperture *d*1, the elastic cushion or spring and an actuating lever serving to compress said cushion and open the valve, substantially as specified. 3rd. The combination of the body A1 having valve seat *a* and apertured flange D, valve stem C, the valve C1, inverted cup-shaped cushion or spring E, collar *h*, nut or washer H and actuating lever G, all combined and arranged substantially as and for the purpose described. 4th. The combination, with the double headed actuating lever G having inclines *g*, *g*, *g*, *g* on its hub, of the cap F having angular projections *f*1, *f*1, *f*1, *f*1, substantially as and for the purpose specified. 5th. The combination, with the valve stem C, of the spherical flexible valve C1 arranged to be reversed, as and for the purpose described. 6th. In a faucet, the combination, with the vertical pipe A1 having valve seat, and the valve and its stem, of the nozzle or outlet A arranged on the same level as the said valve seat, as and for the purpose described.

No. 18,772. Composition of Matter for General Use as a Fire-Proof Non-Conductor of Heat and Sound.

(Composition de Matières pour Servir Généralement de Non-Conducteur Réfractaire de la Chaleur et du Son.)

John F. Torrance, Ottawa, Ont., 4th March, 1884; 5 years.

Claim.—A composition composed of infusorial earth, asbestos and glue, in about the proportions and for the purposes set forth.

No. 18,773. Photographic Printing.

(Impression Photographique.)

Redfield B. West, Guilford, Ct., U.S., 5th March, 1884; 5 years.

Claim.—1st. The herein described improvement in the process of photographic printing, consisting in subjecting the paper to be printed upon to a bath composed of potassium, bichromate, magnesium sulphate and mercuric chloride, in the proportions and substantially as described. 2nd. The herein described improvement in photographic printing, consisting in subjecting the print to a bath composed of gallic acid, ferrous sulphate, aluminum and ammonium, sulphate and sodium hypo sulphite. in the proportions and substantially as described. 3rd. The herein described improvement in the process of photographic printing, consisting in subjecting the paper upon which the print is to be made to a bath composed of potassium, bi-chromate magnesium, sulphate mercuric chloride, and then, after printing, to a bath composed of gallic acid. ferrous sulphate, aluminum and ammonium sulphate and sodium hyposulphite, in the manner, and the said baths in the proportions, substantially as described.

No. 18,774. Fountain Pen. *(Plume-Fontaine.)*

Lewis E. Waterman, Brooklyn, N.Y., U.S., 5th March, 1884; 5 years.

Claim.—1st. An ink-duct for a fountain pen, consisting of a bar having a longitudinal groove formed in its surface, and one or more longitudinal fissures in the side or sides of said groove, substantially as set forth. 2nd. An ink-duct for a fountain pen, consisting of a bar having one or more longitudinal grooves in its side, which is to be in proximity to the pen, each of said grooves having one or more longitudinal fissures in its side or sides, and one or more additional longitudinal grooves, whereby air may be admitted to the reservoir independently of the ink-conveying groove, substantially as hereinbefore set forth. 3rd. In a fountain pen, the combination, substantially as hereinbefore set forth, of a barrel or ink reservoir, a tube connected therewith, an ink-duct supported within said tube, and consisting of a bar having one or more longitudinal grooves formed in that portion of its surface which is in proximity to the pen, with one or more longitudinal fissures in the side or sides of said groove or grooves, and a pen secured between said tube and ink-duct. 4th. An ink-duct for a fountain pen, having one or more longitudinal fissures in its walls for facilitating the passage of the ink through said duct. 5th. In a fountain pen, the combination, substantially as hereinbefore set forth, of a barrel or ink reservoir, a pen united thereto, and an ink-duct consisting of a bar having one or more longitudinal grooves formed in that portion of its surface which is in proximity to the pen, and one or more additional longitudinal grooves, whereby air may be admitted to the reservoir independently of the ink-conveying groove.

No. 18,775. Governor for Steam Engines, Water-Wheels and Wind-Mills.

(Gouverneur pour Machines à Vapeur, Roues Hydrauliques et Moulins à Vent.)

Mathias I. Beaudreau, Fond du Lac, Wis., U. S., 5th March 1884; 5 years.

Claim.—In a governor, the combination of the fans F, cross-head C and chains K, so arranged that the fans F are connected to the cross-head C and are revolved and lifted by the chains K, substantially as described.

No. 18,776. Eye-Glass. *(Lunette.)*

Dudley L. Tice, Reading, Penn., U.S., 5th March, 1884; 5 years.

Claim.—1st. As an improvement in eye-glasses, the handle slotted or bifurcated at its upper end, in combination with the eye-glass frames formed with an extension fitting in the slotted end of the handle, and an upwardly-projecting pin or stop connecting the parts, as and for the purpose set forth. 2nd. In eye-glasses, the combination, with the nose-pieces and eye-glass frames, of plates secured to the upper ends of the nose-pieces, and the bow pivoted at its ends to the said plates, as set forth. 3rd. In eye-glasses, the combination, with the nose-pieces and eye-glass frames, of plates secured to the upper ends of the nose-pieces, a rod extending across and within the plates, and the bow pivoted at its ends to said rod, as and for the purpose set forth. 4th. As an improvement in eye-glasses, the combination, with the nose-pieces and eye-glass frames, of plates secured to the upper ends of the nose-pieces and formed with lugs *c*, a rod extending across and connecting the lugs, and the bow pivoted at its ends to said rod, as and for the purpose set forth.

No. 18,777. Flexible Tube for Air Brakes, &c. *(Tube Elastique pour Freins Atmosphériques, &c.)*

Frank A. Mogowan, Trenton, N. J., U.S., 5th March, 1884; 5 years.

Claim.—1st. The combination of an inner and an outer flexible tube for air brakes or other purposes, with an attachment having a tubular stem or tail piece to which both tubes are secured, substantially as set forth. 2nd. The combination of an inner and outer tube for air brakes or other purposes, and a stem or tail piece constructed for attachment to both tubes, with a signalling device actuated by air or other fluid under pressure, which may gain access to the annular space between the two tubes, substantially as specified.

No. 18,778. Horse Rake. *(Râteau à Cheval.)*

Louis H. Hébert, St. John, Que., and Joseph Coursolle, Ottawa, Ont., 5th March, 1884; 5 years.

Claim.—1st. In a horse hay rake, the main lever E having a staple-shaped portion and the whiffletree connection attached to the outer leg of the same, substantially as described. 2nd. The main lever E, fulcrumed in the knuckle *c*, substantially as shown and described. 3rd. The connecting link H, extending past its connection with the short arm *g*, and carrying the set screw *h* with its tightening nut *i*, substantially as shown and described. 4th. In a horse hay rake, the combination of the main lever E having the staple-shaped portion shown, and the holes *d* made in the outer leg of the same, with the hand lever shown having the long arm *f* and short arm *g*, and the connecting link H having the set screw *h*, substantially as shown and described and for the purpose set forth.

No. 18,779. Mould for Pressed Glass-Ware.

(Moule de Verrerie.)

William Haley, Ravenna, Ohio, U. S., 5th March, 1884; 5 years.

Claim.—1st. In moulds for pressed glass-ware, the plunger, in combination with a sliding plug to form an opening through the glass, having its upper end above the molten glass to be pressed and closely fitting the plunger, while the latter is forcing down the plug and molding the glass, substantially as described. 2nd. In molds for pressing glass-ware, the plunger *a* and sliding plug *c*, having their ends closely fitted to each other, and a sliding sleeve *e* surrounding and closely fitting the plug, and each having vertical movement independent of the other, in combination with bottom-plate *d* connected with, and supporting both the plug and sleeve, substantially as described. 3rd. In molds for pressing glass-ware, the plug *c* and its sleeve *e*, each having vertical movement independent of the other, in combination with the weighted lever *l*, sliding-bar *e*1, bottom plate *d*, hinged half-rings *s s*1 and plunger *a*, the sliding plug *c* extending above the molten glass to be pressed, and its upper end closely fitting the bottom of plunger *a*, substantially as described.

No. 18,780. Flexible Urinal. *(Urinal Flexible.)*

Carrie S. Murphy, Dayton, Ohio, U.S., 5th March, 1884; 5 years.

Claim.—The urinal, substantially as set forth, having a shallow rigid cup with neck for the attachment of the elastic receptacle, and having a flexible handle with one end attached to the neck of said receptacle, and the other to the body of the same.

No. 18,781. Expanding Reamer.

(Foret à Mèche Variable.)

Peter Gendron, Toledo, Ohio, U.S., 5th March, 1884; 5 years.

Claim.—1st. In an expanding reamer, wherein the head is provided with lengthwise adjustable cutters having inclined ends, and in combination therewith, the dished nut H, substantially as and for the purpose specified. 2nd. In an expanding reamer provided with lengthwise adjustable cutters, and in combination therewith, the supporting nut G and retaining nut H, substantially as specified. 3rd. A reamer constructed substantially as described, and in combination therewith, the supporting nut G as a means of supporting the outer ends of the cutters, substantially as set forth. 4th. An expanding reamer consisting of the shank A, longitudinally channelled head B, taper cutters D, collar or sleeve E, nut F, supporting nut G and retaining nut H, when constructed, arranged and operating substantially as and for the purposes set forth.

No. 18,782. Reed Organ. *(Orgue.)*

Charles R. Ford, Boston, Mass., U. S., 5th March, 1884; 5 years.

Claim.—1st. In combination with the reeds and the keys for operating the valves thereof, the series of mutes and their levers, and oblique fingers arranged and adapted to operate substantially as described, and provided with mechanism for effecting depression of