able wherein each primary conductor is surrounded by a secondary conductor insulated therefrom for receiving a current of sign opposite to that passed through the primary conductor, in order to neutralize induction. How method of manufacturing drawn telegraph cables by passing a conducting wire covered with cotton through a bath of molten insulating material, and wire covered with cotton through a bath of moiten insulating material, and enclosing the whole in a drawn metal tube at one operation. 5th. In apparatus for the manufacture of telegraph cables, the combination of the chamber E charged with lead, the perforated plunger F, tubes G, with nozzle a and die o, said tube G communicating with insulator vessel I and connected by the bolts H with plunger F, so as to move therewith all arranged and operating in conjunction with a hydraulic press. 6th. The combination of the insulator vessel I and lead chamber E, with the hot oil baths K K.

No. 12,666. Window Sash Lock. (Arrête-croisée.)

John O. Parker, Stratford, Ont., 23rd April, 1881; for 5 years.

Claim.—1st. In combination with a window sash a pawl E pivoted in a box C and actuated by a spring F, in combination with a notched bar D ar ranged and operating as specified. 2nd. In combination with a window sash, a two winged spring F, in combination with the pivoted pawl E have ing flattened ends, to receive the pressure of the spring.

No. 12,667. Improvements on Fountain Pens.

(Perfectionnements aux plumes-fontaines.)

Henry A. Walke, Hamilton, Ohio, U.S., 23rd April, 1881; for 5 years.

Henry A. Walke, Hamilton, Ohio, U.S., 23rd April, 1881; for 5 years. Claim.—1st. The combination of the holder curved at its lower end, and the pen provided with a valve to automatically close the end of the holder and furnish a supply of ink or cut off the same, said valve being loosely held between the ribs of the pen. 2nd. The combination of a reservoir holder having a bent end, with a pin C and valve E adapted to automatically open and close the lower end of the holder, said pen being thinner and more elastic just above the valve, so as to afford the valve more play in the act of writing. 3rd. In combination, the holder A B, pin C and valve E, said valve being composed of washers et et, and rivet and sorew es, 4th. The combination of pen C and the reservoir holder composed of an upper section A, and a lower curved section B, with the extension air tabe composed of the fixed section F and the unencumbered longitudinally adjustable section F, for regulating the flow of ink to the pen. justable section F1, for regulating the flow of ink to the pen.

No. 12,668. Improvements on Composite Pavements. (Perfectionnements aux pavés composites.)

Peter Stuart, Edinburgh, Scotland, 23rd April, 1881; for 5 years.

Claim .- 1st. In manufacturing composite pavements, platforms, landings and the like of a layer of broken dry stones, a layer of compressed concrete, and a layer of a composition of broken or cubed granite and cement, with or and a layer of a composition of broken or cubed granite and cement, with or without the addition of ground or pulverized hematite, magnetic or black oxide, or other iron, or colouring matter, and with or without strengthening iron rods and wires embedded between the said composition and the concrete. 2nd. Laying the composite pavement or other like structure in alternate squares, with the layer of concrete in each alternate square projecting beyond the layer of grain lithic composition. 3rd. The composition of broken or cubed granite and Portland and other cement, with or without the addition of ground or pulverized hematite, magnetic or black oxide, or other iron ore or colouring matter, for the manufacture of pavements, floors, platforms, stair steps, landings and other like structures, and generally for the manufacture of pavements, floors, platforms and the like, the dry composition of Portland and other cement and sand, with or without the addition of ground or pulverized hematite, magnetic or black oxide, or other iron ore, or colouring matter, floated into the body of the upper layer of broken granite and cement.

No. 12,669. Improvements in Bed Springs.

(Perfectionnements aux ressorts des lits.)

Edwin L. Bushnell, Poughkeepsie, N. Y., U. S., 23rd April, 1881; for 5 years.

Claim.—The spring having at their ends the eyes o having their inner sides open, but of less width than the outer side, whereby the application of the fastening is facilitated and its escape during operation prevented.

No. 12,670. Improvements in Ploughs. (Perfectionnements dans les charrues.)

George Thomson and John Thomson, Woodstock, Ont., 23rd April, 1881; (Extension of Patent No. 5,975.)

No. 12,671. Improvements in Hoop Coilers. (Perfectionnements aux machines à lover les cercles.)

John B. Pike, Harwick, Ont., 23rd April, 1881; (Extension of Patent No.

No. 12,672. Improvements on the Method of Treating Raw Hominy. (Perfectionnements dans le traitement du mais concassé brut.)

William S. Boon, St. Louis, Mo., Maitland Boon and Rozell H. Hall, Watertown, N. Y., U. S., 23rd April, 1881; for 5 years.

Claim.—1st. As a new article of food, in alkalized raw hominy, in contradistinction to cooked and decorticated corn produced by boiling or scalding the same with lye. 2nd. A new article of manufacture in the described preserved hominy which consists of hulled granulated, raw alkalized dry kernels of corn. 3rd. The process of preserving hominy, consisting of taking the hulled, raw, dry kernels of corn, as they come from the mill, and saturating or wetting them with an alkaline solution, and then drying without washing or cooking the same.

No. 12,673. Improvements in Sights for Fire-Arms. (Perfectionnements aux mires des armes à feu.)

George Freund, Cheyenne, Wyoming Ty., U.S., 23rd April, 1881; for 5

years. Claim.—1st. The usual sight notch, and an angular or other shaped opening vertically below the notch. 2nd. The usual sight notch, and an opening vertically below the notch, the bar forming the bottom of the opening being in a line at right angles to a line passing through the centre of the sight notch and opening. 3rd. The usual sight notch, the angular or other shaped peep hole, placed below the sight notch, and having a servated bottom or edge. 4th. A rear sight for fire-arms made of two or more parts and combined to form the usual sight notch, and a round square tribangular, or other shaped opening below, or in a vertical line with the sight angular, or other shaped opening below, or in a vertical line with the sight notch to serve as a peep hole. 5th. The ratchet or stepped side combined with a spring sight having an upper sight notch, and a lower peep notch or opening, whereby the sli le forms a bottom to the lower notch while serving to elevate the sight.

No. 12,674. Improvements on Drying Apparatus. (Perfectionnements aux appareils de dessication.)

Augustus J. Kuhn, Lewistown, Penn., U. S., 23rd April, 1881; for 5 years. Claim.—lst. The hollow box with its means of discharge, and the pipe of with its stuffing box, in combination with the live steam and exhaust pipes. 2nd. The combination, with the annular chamber between shells be, of the box n having radial tubes o extending into the sand chamber, and the spirally flanged pipe m passing through the hopper to the inlet. 3rd. The combination, with the revolving cylinder and inlet pipe for exhaust steam, of the pipe s for live steam connected with the coupling and passing through the house of the revolving cylinder steam pipe.

No. 12,675. Improvements on Clothes Pins.

ing through the boxing of the revolving steam pipe.

(Pefectionnements aux épingles à linge.)

Charles S. Simpson, Brompton Falls, Que., 23rd April, 1881; for 5 years. Claim.—The clothes clamping device, composed of the parts A having groove D, and reduced parts forming space E with part B, and pivot C.

No. 12,676. Improvements on Gold Saving Sluice Boxes. (Perfectionnements aux boites-écluses pour conserver l'or.)

Maurice M. Murray, Coulterville, Cal., U. S., 23rd April, 1881; for 5 years.

Claim.—The combination, in a sluice box, of the tank or receptacle B, grate H and screw C having spiral blades a.

No. 12,677. Improvements on Thrashing Ma-(Perfectionnements aux machines chines. à battre.)

James Ferguson, St. Elmo, Ont., 23rd April, 1881; for 5 years.

James Ferguson, St. Eimo, Ont., 23rd April, 1881; for 5 years.

Claim.—1st. The combination, with the cylinder shaft, provided with bevelled pinio 1D, of the vertical shatt Fr carrying bevelled wheels E F2, yoke H having hollow stem G journalled to frame a, shaft I carrying bevelled wheel K and provided with tumbling rod couplings JJ. 2nd. The circular band X secured to yoke H, band Y secured to main frame a and a clamping screw or frame to hold the bands conjoined, when the yoke is in an adjusted position, to suit the angle of the tumbling rods. 3rd. The combination, with frame a, of the vertical shaft M: having disk O ecceptically connected to shoe Q, by rod P, and carrying a rotary head R having shaft S driven by cog gears T to operate band wheel U, for driving the straw conveyor and to shake the shoe combinedly by suitable bands.

No. 12,678. Improvements on Children's Cribs.

(Perfectionnements aux berceaux.)

John P. Alexander, Max Elser and DeWitt C. Pendery, Footworth, Texas, (Assignees of Fred H. Brown, St. Louis, Mo.,) U. S., 23rd April, 1881; for 5 years.

Claim.—1st. A child's crib or cradle, provided with a musical device operated automatically by the vibrations of the crib body or basket. 2nd. The combination, with the supporting frame A provided with the spring or strings MI, of the swinging crib basket B having pins on feathers LI playing upon said strings. 3rd. The combination, with the supporting frame A and swinging crib B suspended within said frame by hinged rods C, of the pitman H and rock shaft I having crauk i, srms K carrying balls or tassels M, set screw O and adjustable fan N P. 4th. In a child's crib, the adjustable fan P, in combination with the rock shaft I and mechanism for operating the same. ing the same

No. 12,679. Improvements on Boat Plugs.

(Perfectionnements aux tampons des bateaux.)

Lewis H. Raymond, New York, U.S., 23rd April, 1881; for 5 years.

Claim.—1st. The valve H with a binding ring J hinged to the cage K. 2nd. The combination, with the perforated boat bottom F of the hinged valve H and the cage K. The combination, with the perforated boat bottom F of the plate A, the hinged valve H and the cage K. The combination, with the perforated boat bottom F, of the plate A, the hinged valve H and the cage K. 4th. The combination, with the boat bottom F, of the hinged valve, the cage K, the threaded neck B with a perforated top E, and of the screw cap L.

No. 12,680. Improvements in Revolving Book Cases. (Perfectionnements aux bois

bibliotheques tournants.)

John Danner, Canton, Ohio, U. S., 25th April, 1881; (Extension of Patent No. 6.371.)