

folded within the ferrule their ends projecting therefrom, and the nail securing said stem and ferrule to the body of the brush, substantially as set forth. 4th. In combination with the brush body having the annular recess therein, the socket leading centrally therefrom, the stem having on two opposite faces the tuft of bristles, one end of said stem passing into the socket, said stem being secured in the body of the brush, substantially as specified. 5th. The combination with the brush body having the annular recess in its under face, the ferrule located in said annular recess, the stem having the brush fiber secured transversely thereto, said stem and fiber lying within the ferrule, the fiber being folded therein with its ends projecting outward, substantially as specified.

#### No. 42,611. Refrigerator. (*Réfrigérant.*)

The Trussell Automatic Freezer Company, assignee of Wilbert Clarence Trussell, all of Boston, Massachusetts, U.S.A., 14th April, 1893; 6 years.

*Claim.*—1st. A refrigerator or refrigerating structure, having a storage chamber, an air space surrounding said chamber, and one or more cans or receptacles containing a refrigerating compound or mixture located in said air space, as set forth. 2nd. A refrigerating structure, comprising a storage chamber, an air space surrounding said chamber, and groups of receptacles containing a refrigerating mixture or compound and located in the air space at opposite sides of the storage chamber, as set forth.

#### No. 42,612. Stove Pipe Elbows.

(*Coude de tuyau de poêle.*)

Kieckhefer Bros. & Company, assignee of Sebastian Walter, all of Milwaukee, Wisconsin, U.S.A., 14th April, 1893; 6 years.

*Claim.*—1st. A stove pipe elbow formed in arc shape and constructed of a single piece of sheet metal intact throughout its entire extent, the elbow having but one joint and that formed by a seam along the line of its greatest arc, substantially as described. 2nd. A pipe elbow constructed in arc form of a single sheet of metal, folded medially into a series of transverse radiating ribs, highest along its central longitudinal line, decreasing outwardly and vanishing at a distance from the edges of the sheet, the longitudinal edges of which sheet of metal are joined together in a seam along the line of the greatest arc of the elbow, substantially as described.

#### No. 42,613. Rice Scourers. (*Machine à nettoyer le riz.*)

Squire A. Pickett, Crowley, Louisiana, U.S.A., 14th April, 1893; 6 years.

*Claim.*—In a machine substantially as described, the combination of the casing having an opening E, and grooved or recessed at e, along the edges of said opening, the wire netting fitted over the opening E, and inserted at its edges in the groove or recess e, the strips fitted in the groove or recess, and the fastening bolts for such strips, all substantially as and for the purpose set forth.

#### No. 42,614. Bicycles. (*Bicycle.*)

Henry George Euntion Pointon, Toronto, Ontario, Canada, 14th April, 1893; 6 years.

*Claim.*—1st. As an improved drive for bicycles, the combination with the pedals of the sprocket wheels J, double sprocket wheels E, E', journalled on the shaft C, and sprocket pinion L, secured to the hub of the main driving wheel, these sprocket wheels being connected together by the sprocket chain P, and sprocket chain O, as and for the purpose specified. 2nd. In a bicycle, the combination with the pedal and pedal axle, of the sprocket wheel F, secured on the end of the same and connected by the sprocket chain Q, to the sprocket wheel K, on the stud I, the sprocket wheel J, connected by the sprocket chain P, to the portion E', of the double sprocket wheel E, E', the portion E, of the double sprocket wheel E, E', being connected by the sprocket chain O, to the sprocket pinion L, attached to the hub of the driving wheel, the double sprocket wheel E, E', being loosely journalled on the axle E, as and for the purpose specified. 3rd. The combination with the pedal axle C, sprocket wheel F, chain Q, sprocket wheels K and J, and stud I, sprocket chain P, double sprocket wheels E, E', sprocket chain O, and sprocket pinion L, of the clip G, provided with an upper flange G', having secured to it the journal box H, by the bolts h, passing through the slots h', in the upper flange, as and for the purpose specified. 4th. The combination with the pedal axle C, sprocket wheel F, chain Q, sprocket wheels K and J, and stud I, sprocket chain P, double sprocket wheels E, E', sprocket chain O, and sprocket pinion L, of the clip G, having the journal box H, secured thereto and provided with teats g, fitting into holes g', in the back bone A', as and for the purpose specified.

#### No. 42,615. Flood Water Trap.

(*Trappe pour inondation.*)

Joseph Louis Smith, Toronto, Ontario, Canada, 14th April, 1893; 6 years.

*Claim.*—1st. As a flood water trap for cellars or basements the combination with the drain pipe G, chamber F, chamber D, and grating B, of the slanting partition E, having an opening H, and a flap I, suspended from above the opening so that it will, by its own

gravity close such opening, as and for the purpose specified. 2nd. The combination with the drain pipe G, chamber F, chamber D, and grating B, of the slanting partition E, having an opening H, and a flap I, provided with a layer of rubber O, secured in position by the plate M, bolt N, and nut n, and suspended above the opening so as to cause the rubber edge of the layer O, to rest against the flange h, as and for the purpose specified. 3rd. The combination with the drain pipe G, chamber F, chamber D, and grating B, of the slanting partition E, having the opening H, and flap I, provided with a layer O, of rubber secured in position by the plate M, bolt N, and nut n, and having secured in the top of the flap the screw eyes J, by which it is suspended by the links K, from the eye bolts L, secured in the partition E, as and for the purpose specified. 4th. The combination with the drain pipe G, the chamber F, with slanting concave bottom, the chamber D, with slanting concave bottom above the level of the chamber F, and the grating B, of the slanting partition E, having the opening H, with concave bottom and the flap I, with convex bottom suspended from above the opening and resting of its own gravity against it, as and for the purpose specified.

#### No. 42,616. Cotton Harvesting Device.

(*Machine à récolter le coton.*)

Gerard Beekman, New York, State of New York, U.S.A., 14th April, 1893; 6 years.

*Claim.*—1st. A device for picking cotton, consisting in a revoluble mass of cotton or other fibre of similar structural character, and suitable mechanism for rotating the mass upon its own axis, the fibres of the said mass being exposed in their native or non woven state, and adapted to engage with and extract the growing cotton, substantially as described. 2nd. The combination in a cotton picking device, of a mass of cotton or other fibre of similar structural character in its native or non woven state, and a rotary supporting stem extending into the centre of the mass and secured thereto, forming a core, substantially as and for the purpose described.

#### No. 42,617. Rocker and Cup for Operating Pumps.

(*Bascule et godet de pompe.*)

Joseph Barrett, Petrolia, Ontario, Canada, 14th April, 1893; 6 years.

*Claim.*—1st. The combination of the rocker B, B, and the improved cup C, substantially as and for the purpose hereinbefore set forth.

#### No. 42,618. Journal Box Lifter.

(*Bras pour coussinets de tourillon.*)

Emery E. Taylor, Minneapolis, Minnesota, U.S.A., 14th April, 1893; 6 years.

*Claim.*—1st. A journal box lifter consisting of a bracket adapted to be attached to the top of the wheel, and adjustable connections between the bracket and journal box, whereby the latter can be lifted, substantially as set forth. 2nd. A journal box lifter, comprising a bracket consisting of one member adapted to engage the flange, of a car wheel and another member bearing against the face of the wheel and serving as a brace, and connecting devices between the bracket and journal box, whereby the latter can be lifted by means of nuts and screws, substantially as set forth. 3rd. A journal box lifter for car wheel, consisting of a bracket having a portion for engaging the wheel flange, and a brace bearing against the wheel face, a vertically adjustable yoke connected to the bracket, and means for connecting it to the journal box, substantially as set forth. 4th. A journal box lifter for car wheels, consisting of a bracket for grasping the upper edge of the wheel and having a brace bearing against the wheel face, a chain for engaging the journal box and means for connecting the chain to the bracket and raising or lowering it, substantially as set forth.

#### No. 42,619. Adjustable Wire Bale Tie.

(*Lien ajustable en fil de fer pour ballots.*)

John Wool Griswold, Troy, New York, U.S.A., 14th April, 1893; 6 years.

*Claim.*—1st. A bale tie having at one end a loop, and within said loop a saddle or thimble having a V or wedge shaped opening adapted to receive the opposite end of said band, the aforesaid parts being arranged and operating so that when the end of the band is inserted through the saddle and strain applied, the said end will be drawn and wedged into the apex of the V-shaped opening of the saddle, and will also be clamped therein by the closing together of the parts of the saddle under the applied strain. 2nd. A bale tie having a loop or eye formed at one end, and in said loop or eye a thimble or saddle of soft malleable metal having an external groove receiving the wire of said eye, and a V or wedge-shaped opening adapted to receive the other end of the band, the aforesaid parts being arranged and operating so that when the end of the band is inserted through the saddle and strain applied, the said end will be drawn and wedged into the apex of the V-shaped opening of the saddle, and will also be clamped therein by the closing together of the parts of the saddle under the applied strain.