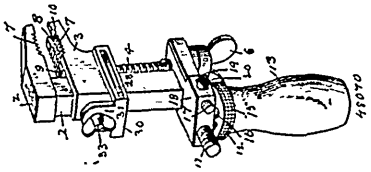
sliding jaw being further provided on its inner gripping face near its outer end with a transverse rounded nail groove, and a handle adjustably attached to one end of said shank, substantially as set forth. 2nd. In a tool of the class described, the combination with the tool shank carrying a fixed and an adjustable jaw, of a detach-



able handle, two fastening means for the handle on the shank, one at right angles thereto and the other parallel therewith, and a catch device for the handle adapted to lock the same in its attached position at right angles to the shank, substantially as set forth. 3rd. In a tool of the class described, the combination of the shank carrying a fixed and an adjustable jaw and provided at one end with a cross-arm having separate right-angularly disposed screw studs or posts, a handle spindle provided with an interiorly threaded end adapted to engage either of said studs or posts, a turning handle loosely mounted on said spindle, and a catch device for said spindle arranged in a line with one of said studs or posts, substantially as set forth. 4th. In a tool of the class described, the combination of a shank carrying a fixed and an adjustable jaw and provided at one end with a cross-arm having at one end separate right-angularly disposed screw-studs or posts, a handle spindle provided with an interiorly threaded end adapted to engage either of said studs or posts and a finger collar at its threaded end provided in its outer face with a series of notches, and a spring actuated catch stud or pin mounted on said cross-arm in a line with one of said studs or posts and adapted to engage the notches of said collar, substantially as set forth. 5th. In a tool of the class described, the combination of a shank carrying a fixed and an adjustable jaw, and provided at one end with a cross-arm, a tubular handle spindle adapted to be adjustably attached to said cross-arm and provided in its outer end with a squared socket, and a brace-arm provided with a squared end adapted to be fitted in the socket of said handle spindle, and having a threaded bit holding opening or socket, substantially as set forth. 6th. In a tool of the class described, the combination with the tool shank carrying a fixed jaw and a sliding jaw working on said shank, of an adjustable U-shaped clamp fitted to said sliding jaw and adapted to engage the edge of a bench or table, substantially as set forth. 7th. In a tool of the class described, the combination with a tool shank carrying a fixed jaw and a sliding jaw mounted on said shank and provided in one side with a threaded opening, a transverse guide-plate or bar attached to one side of said sliding jaw, a U-shaped clamp-yoke embracing said sliding jaw and provided with opposite slotted arms receiving the extremities of said guide plate or bar, and a clamp-plate having a threaded opening, and a clamp screw mounted in the threaded opening of said clamp plate, substantially as set forth.

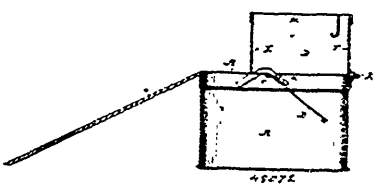
No. 48,071. Welding Compound.

(*Composition pour souder.*)

Hiram G. Hicks, Walpole, New Hampshire, U.S.A., 29th January, 1895; 6 years.

Claim.—A compound for use in welding, refining or treating steel, composed of borax, salammoniac, carbonate of iron and silicic oxide combined in the proportions substantially as specified and prepared in the manner, substantially as described.

No. 48,072. Animal Trap. (*Piège.*)

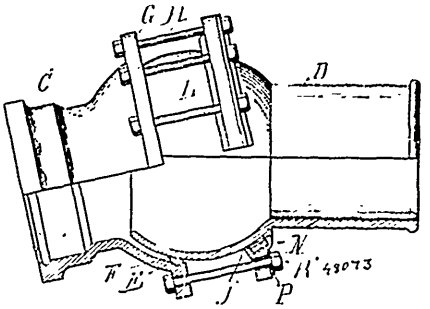


Ebenezer B. Stevens, Globeville, Colorado, U.S.A., 29th January, 1895; 6 years.

Claim.—In an animal trap, a receptacle forming a cage, and having a removable cover, a hinged trap door in said cover, a weighted, counterbalancing arm adjustably attached to said door and projecting down through a slot therein into the receptacle, a narrow, covered run-way inclosing said door, an opening in one end of said run-way, a screen or grating forming the other end of said run-way, openings in said cover, slides arranged to close said openings, a platform removably supported at one end upon said receptacle, and a stop pin adapted to be inserted in the receptacle either above or below the free end of said door, substantially as specified.

No. 48,073. Ball and Socket Joint.

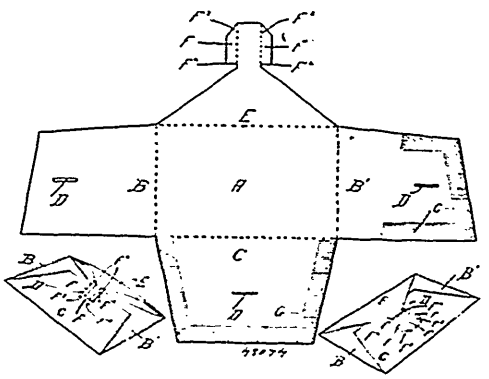
(*Joint à boulet et joint sphérique.*)



Miciah Walker, Port Huron, Michigan, U.S.A., 29th January 1895; 6 years.

Claim.—1st. In a flexible pipe joint, the combination with a ball member, of a socket member, a ring surrounding the ball member, a series of springs interposed between the ring and ball, and a series of adjusting bolts connecting the ring to the socket member, substantially as described. 2nd. In a flexible pipe joint, the combination with a ball member, of a socket member, a recessed ring surrounding the ball member, adjusting connecting bolts between the ring and socket member, and a spring secured in the recess of the ring and bearing on the ball, substantially as described. 3rd. In a pipe joint, the combination of the ball and socket members of a ring surrounding the ball, semi-elliptical spring supported in the ring and having extending portions bearing against the ball and tension bolts on the socket member engaging the ring, substantially as described. 4th. In a flexible pipe joint, the combination with a ball and socket member, of a separate ring surrounding the outer end of the ball, having a depression of its inner face, a series of springs fixed in the depression, a series of packing strips O in the ring, and the bolts H connecting the ring and socket, substantially as described.

No. 48,074. Safety Envelope. (*Enveloppe de sûreté.*)



John Henry Buckley, Milltown, New Jersey, U.S.A., 29th January, 1895; 6 years.

Claim.—1st. A safety envelope, comprising a central body having side and bottom flaps, folded thereon and provided with aligning slots, an upper flap, a tongue upon said upper flap of substantially equal width with and adapted to enter the slot, and flanges hinged to each side of the tongue and folding thereon, and adapted when opened to prevent beyond said slots to engage the edges thereof and lack the flaps together, as well as to prevent the withdrawal of the tongue, substantially as shown and described. 2nd. A safety envelope comprising a central rectangular body having side and bottom flaps folded thereon and secured together and provided with aligning longitudinal slots therein, an upper flap secured to said body, a straight tongue projecting from said upper flap, of substantially equal width with, and adapted to enter the slots, flanges hinged to each side of the tongue from the top thereof approximately to the junction of the flap therewith, said flanges being adapted to fold on said tongue to enter the slots, and when opened out to project beyond the said slots to engage the edges thereof and lock the flaps together, tapered side portions upon the upper ends of said flanges to prevent the same from catching between the flaps, and square shoulders upon the lower ends thereof to prevent the withdrawal of the tongue without tearing off the flanges, substantially as shown and described.