R. PAYTON.

HANDHOLD FOR IMPLEMENTS.

APPLICATION FILED NOV. 23, 1909.

1,099,201. Patented June 9, 1914.

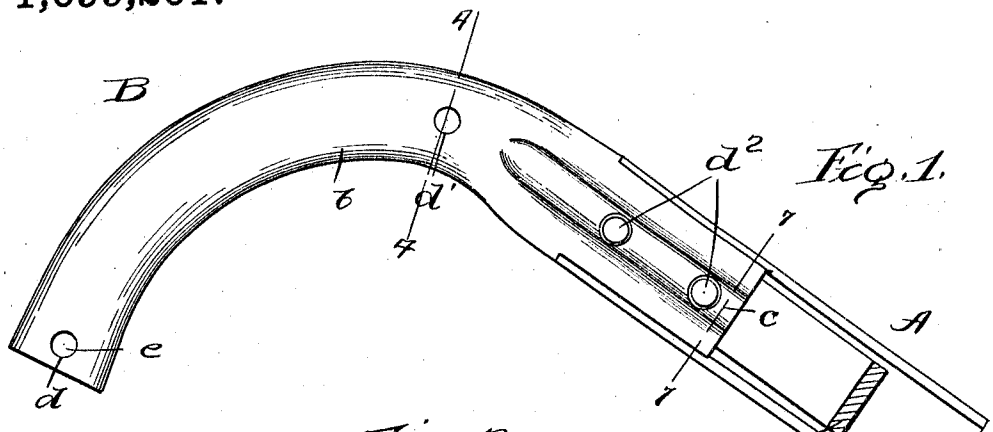


Fig. 1.

Fig. 2.

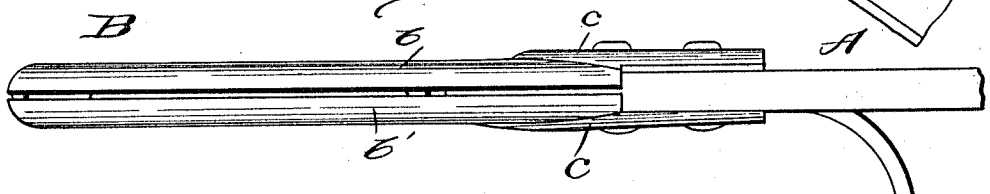


Fig. 3.

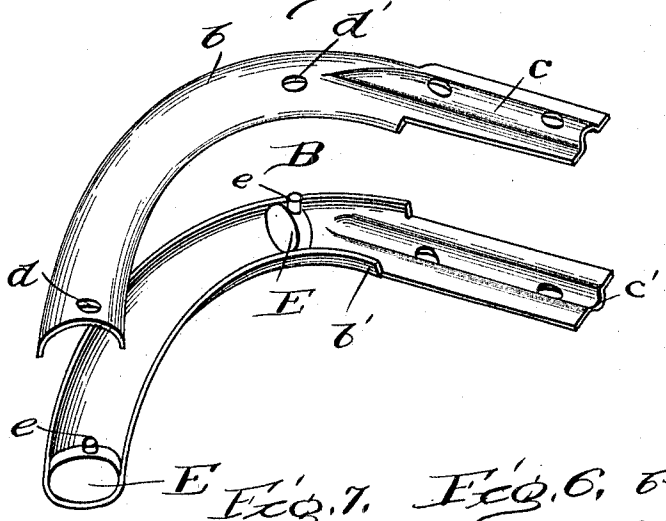


Fig. 5.

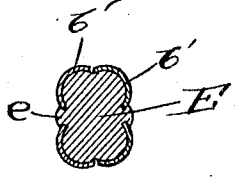


Fig. 4.

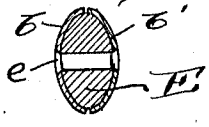


Fig. 7.

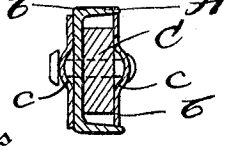
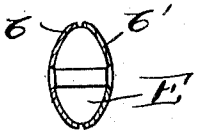


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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HANDHOLD FOR IMPLEMENTS.

1,099,201. Specification of Letters Patent. Patented June 9, 1914.

Application filed November 23, 1909. Serial No. 529,625.

To all whom it may concern:

Be it known that I, RICHARD PAYTON, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Handholds for Implements, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in that part of the handle of a plow or similar implement which serves as a hand-hold, the upper curved part of the handle.

It consists in forming a hollow hand-hold from pieces of stamped or swaged sheet metal, in combination with bracing and spacing devices related to the sheet metal parts in such way as to insure proper conformation of the parts in relation to each other and of the entirety, and to secure great strength, lightness and elasticity; the hold as an entirety being adapted to be secured to the upper end of a handle proper.

Figure 1 is a side view of a plow handle having applied thereto a hand-hold of my improved character. Fig. 2 is a top view of the same. Fig. 3 shows the two parts of the hand-hold separated. Fig. 4 is a section on the line 4—4 of Fig. 1. Fig. 5 is a section similar to Fig. 4, but showing a modified construction. Fig. 6 is a transverse section through the hand-hold showing still another modification; and Fig. 7 is a section on the lines 7—7 of Fig. 1.

In the drawings A indicates the lower part of a plow handle, and B the hand-hold, as an entirety. It comprises two sheet metal halves or parts, respectively indicated by *b*, *b'*. Each of these is made by first cutting a blank from flat sheet metal. The blank is subjected to the action of a die or swage which imparts to one end of it a concavo-convex shape, as shown in Figs. 3 and 4; and at the other end produces at the central part, transversely an outward bulging or rib-like section *c*. The two sheet shells are counterparts of each other, one being right and the other left. At the time of swaging the halves, or prior thereto, apertures *d*, *d'*, d^2 are formed therein.

E, E indicate metal blocks used for bracing, spacing and fastening together the two sheet halves, they being generally formed as castings. They are fastened by laterally projecting rivet metal, either lugs *e* integral with the blocks, as shown in Figs. 3 and 5, or the end parts of pins of some metal capable of being upset, as shown in Figs. 4 and 6, these pins when used passing through apertures in the bracing blocks, as in Fig. 4, or passing through the sheet halves on lines near, but outside of, the blocks. The transverse dimensions of these blocks E are such as to normally tend to hold apart the adjacent edges of the shell halves *b*, *b'*, not only prior to but after the riveting. It is practically impossible when forming the shell halves, on the one hand, and the blocks, on the other, to insure that the cross dimensions of the blocks shall exactly equal the cross dimensions of the space between the two shells if the latter are designed to have their edges come in contact. Hence I so relate the dimensions of the blocks and those of the interior chamber or space surrounded by the shells that the latter can be pressed tightly against the blocks even though their interior contours do not initially conform exactly to the outer contour of the blocks, this being permitted by the clearance or open space (see Fig. 2) between the edges of the shell halves. When the riveting is effected the rivet heads can be formed with the utmost tightness and the sheet metal of the shells forced down tightly upon the edges of the blocks. This produces not only an extremely firm and rigid handle, without any looseness at the rivet points, but leaves it elastic and light and avoids the disadvantages incident to a design wherein the edges of the sheet halves normally come in contact prior to the riveting.

In assembling, one of the sheet parts is taken and the two lugs *e*, *e*, are inserted into it in such way as to cause one of the lugs of each to pass through one of the apertures *d*. Then the other sheet half is superposed, the other lugs *e* being passed through the apertures *d* therein. The projecting metal of the lugs *e* is then upset in the manner above described, the heads of the rivets tightly crowding the concavo-convex metal down upon the surfaces of the blocks but not bringing the edges of the sheets together. A hand hold is thus made as an integer. Subsequently it is attached to the plow handle. The narrowed flat plate parts at the front ends are placed one against the left vertical side of the handle part *a* and the other lying on the right side. The

brace C of the plow has the upper end fitted into the space between the flanges of the angle handle bar *a*. One of the flat end parts of the hand hold fits against the face of this brace C, and is narrow enough to lie between the upper and lower flanges of the handle iron, see Fig. 7. The rivets which are passed through the handle A, the brace C, and the apertures at d^2 can have their heads so formed and positioned that they will bear forcibly against the outwardly bulged parts *c* of the shell halves. The pressure and the engagement are such that a firm union is effected and no looseness is permitted at the rivet heads, the elastic bulging parts *c* serving as spring-like bodies which maintain a permanent firm contact with the heads.

What I claim is:—

1. A hand-hold for plow handles, consisting of two counterpart concavo-convex shell-like sheet metal elements separable on the longitudinal central plane of the hold, in combination with bracing and spacing blocks between the said sheet metal parts and rigidly secured thereto, said blocks being of greater cross dimensions than those of the normal space inclosed by the sheet metal halves, whereby the latter have their adjacent edges held apart at the aforesaid plane, and rivets securing the sheet metal parts rigidly against the outer surfaces of the spacing blocks, substantially as set forth.

2. A hand-hold for plow handles, consisting of two elastic counterpart concavo-convex shell-like sheet-metal elements separable on the longitudinal central plane of the hold, each formed with an elastic swell or bulge *c* at the end adjacent to the plow handle, means for spacing the rear end parts of the hand-hold to hold them separate from each other but fastening them together, and fastening devices for the front end of the hold adapted to pass through the plow handle and to pass through and bear elastically against the said swells or bulges *c*, substantially as set forth.

3. The herein-described blanks, *b* *b'*, for a hand-hold, each formed with a flat front part having a central swell or bulge *c* and with a rear end part having, in vertical planes, the curvature of the hand-hold of a plow-handle, and concavo-convex in section on transverse planes, and provided with apertures in the swell or bulge *c* and apertures *d*, *d'* in the concavo-convex part, the apertures in one blank corresponding respectively in transverse positions to the apertures in the other for the receiving of fasteners, substantially as set forth.

In testimony whereof I affix my signature, in presence of two witnesses.

RICHARD PAYTON.

Witnesses:
EUGENE L. TAYLOR,
ROY E. ANDERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."