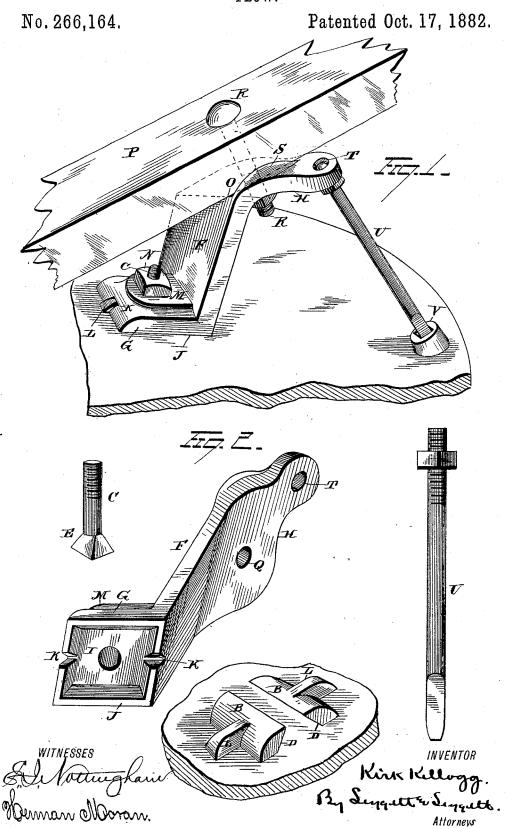
K. KELLOGG.

PLOW.



UNITED STATES PATENT OFFICE.

KIRK KELLOGG, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO HIMSELF AND O. M. ALLEN, JR., OF SAME PLACE.

PLOW.

SPECIFICATION forming part of Letters Patent No. 266,164, dated October 17, 1882.

Application filed February 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, KIRK KELLOGG, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and suseful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in plows, the object being to provide such an appropriate device for securing the plow proper to the handle and frame as will avoid the necessity of passing bolts through the outer or working face of the plow.

A further object of my invention is to pro20 vide a brace for the rear end or wing of the
mold-board.

With these objects in view my invention consists in a new combination of devices for bracing the rear end of the mold-board.

5 My invention further consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is 30 a view showing a section of a mold-board attached by means of my device to the plowhandle, and provided with a brace to support its rear end. Fig. 2 is a similar view, showing the different parts as they appear when des5 tached.

A is the rear section of a plow mold-board, here represented as having its inner or rear face uppermost, its working-face being turned down. Upon the said inner face of the mold-board are 4° cast or securely attached T-shaped lugs, the cross-bars B of which are arranged in opposition to each other, and at a sufficient distance apart to receive between them the bolts C. The opposing edges of the bars B of the said 45 lugs are provided with inwardly-inclining bevels D, which together constitute a V-shaped groove to receive and retain the beveled head

E of the bolt C.

F is an angular plate made of east or wrought

metal, and provided with two arms, G and H.

The lower face of the arm G is provided with a deep recess, I, adapted to fit over the bars B of the lugs, thus permitting the lower edges, J, of the said arm to rest upon the mold-board. Slots k, leading into the recess I, are designed 55 to receive the parts L of the T-shaped lugs, and enable the connection between the moldboard and the arm G the better to resist lateral or wrenching strain. The said arm is provided with a perforation to receive the bolt 60 C, and with a seat, M, for the nut U of the bolts. By means of this method of blind bolting just above described an extremely efficient and strong connection between the mold-board and plow-handle is obtained, and the necessity of 65 passing the connecting-bolts through the moldboard is obviated. The arm H of the plate F is provided with a seat or bearing, O, for the plow-handle P, with a perforation, Q, to receive the bolt R, by which the arm and handle are 70 secured together, and with flanges S, which clasp the sides of the handle and prevent it from lateral movement. The said arm is also provided with a perforated projection, T, which receives one end of the brace-bolt U, the other 75 end of which is inserted in the socket V, cast like the T-shaped lugs on the inner face of the mold-board and located near the rear end thereof. The object of thus bracing the rear end of the mold-board is to prevent it from being 80 broken when plowing in heavy soils or when from other causes it is subject to severe strain.

It is of course apparent that the use of the devices herein described is not limited to the mold-board, for said devices may be applied 85 to the landside or employed in any part of the plow-structure when it is desired to bolt the plow proper to the plow-frame. In instances of such use the equivalent of the plate F may vary widely in shape, except so far as the arm 90 G is concerned, which must remain substantially the same as shown in the drawings.

I would have it understood that I do not limit myself to the exact construction shown and described, but hold myself at liberty to 95 make such changes and alterations as fairly fall within the spirit and scope of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the mold-board or 100

inner face with lugs to clasp the head of a bolt, of a connecting-plate recessed at one end to fit over the said lugs, and perforated to receive 5 the bolt, which is held between them while its opposite end is adapted to be secured to the handle of the plow, substantially as set forth.

2. The combination, with the mold-board or with the landside of a plow, provided on its 10 inner face with a pair of lugs, the opposing edges of which are beveled to receive and retain the head of a bolt, of a connecting-plate recessed at one end to fit over said lugs, and perforated to receive the bolt which is held be-15 tween them, substantially as set forth.

3. The combination, with the mold-board or with the landside of a plow, provided on its inner face with a pair of T-shaped lugs, the opposing edges of which form a V-shaped re-20 cess to receive the head of a bolt, of a con-

with the landside of a plow, provided on its | necting-plate recessed at one end to fit over and lock with the lugs, and perforated to receive the bolts held between them, substantially as set forth.

4. The combination, with the mold-board of 25 a plow, provided on its inner face with lugs adapted to clasp the head of a bolt, and with a socket to receive one end of a trace, of a connecting-plate recessed at one end to fit over and lock with the lugs, and perforated to re- 30 ceive the bolt held between them, and provided at its opposite end with a perforated projection to receive the other end of the brace afore-

said, substantially as set forth. In testimony that I claim the foregoing I 35 have hereunto set my hand.

KIRK KELLOGG.

Witnesses:

A. B. F. PALMER, ABNER S. BAKER.