(Model.) 2 Sheets—Sheet 1.

H. O. KERNS.

DEVICE FOR ATTACHING PLOW BEAMS TO HANDLES.

No. 267,311. Patented Nov. 7, 1882.

Fig. 1.

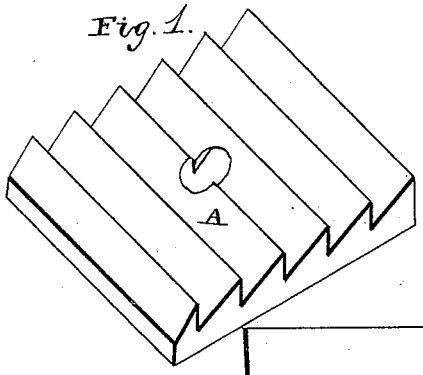


Fig. 2.

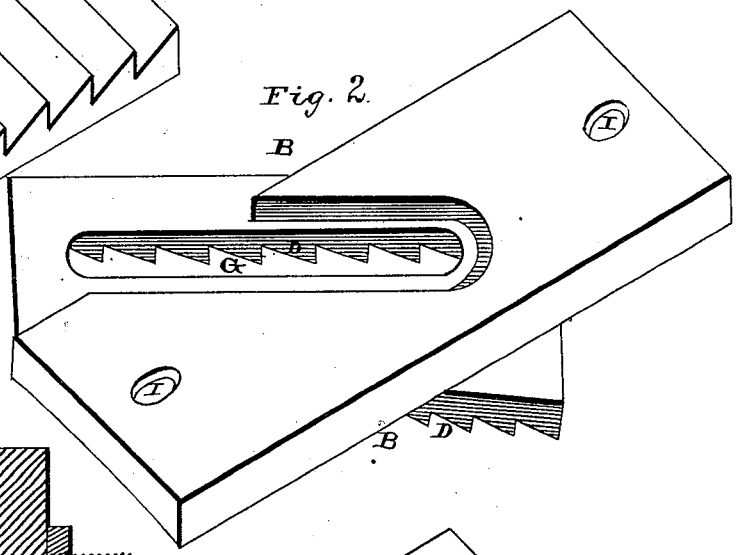


Fig. 4.

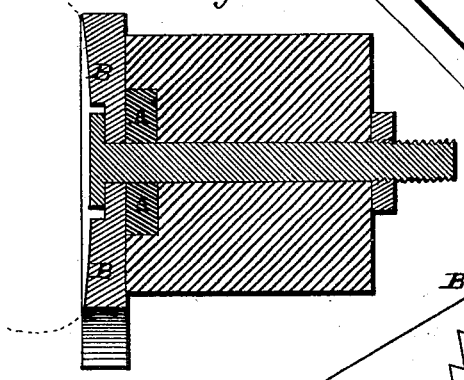
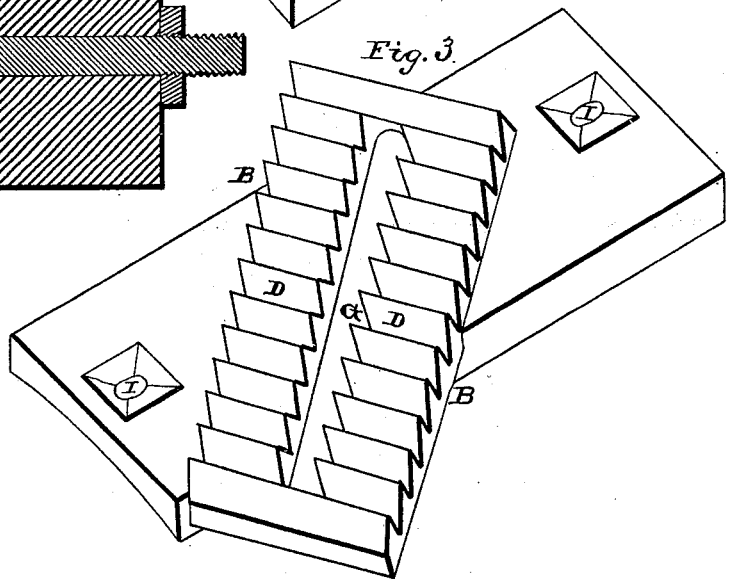


Fig. 3.



Witnesses.
Robt. Johnston.
W. A. Kern

Inventor.
H. O. Kerns.
per
F. A. Lehmann,
Atty.

(Model.)

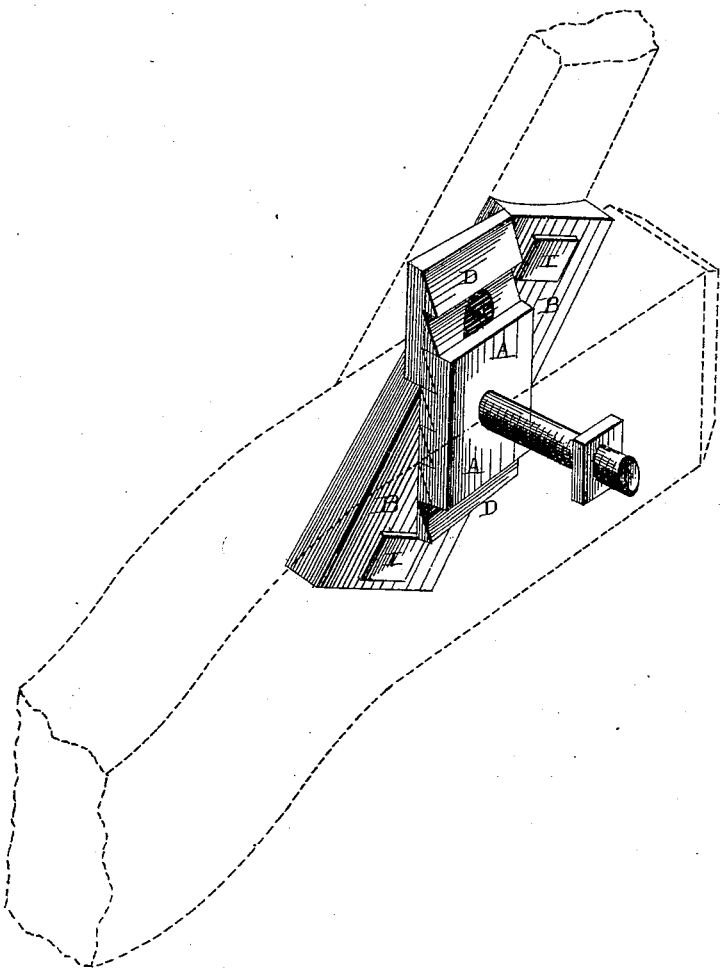
2 Sheets—Sheet 2.

H. O. KERNS.

DEVICE FOR ATTACHING PLOW BEAMS TO HANDLES.

No. 267,311. Patented Nov. 7, 1882.

Fig. 5.



Witnesses.

Louis F. Gardner

E. D. York.

Inventor.

H. O. Kerns,

per

F. A. Lehmann,

Atty

UNITED STATES PATENT OFFICE.

HIRAM O. KERNS, OF SUTHERLIN, VIRGINIA.

DEVICE FOR ATTACHING PLOW-BEAMS TO HANDLES.

SPECIFICATION forming part of Letters Patent No. 267,311, dated November 7, 1882.

Application filed July 14, 1882. (Model.)

To all whom it may concern:

Be it known that I, H. O. KERNS, of Sutherlin, in the county of Halifax and State of Virginia, have invented certain new and useful Improvements in Devices for Attaching Plow-Beams to Handles; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in devices for adjusting plow-beams; and it consists in the combination of a ratchet-plate, which is to be recessed in or secured to the side of the rear end of the beam, a slotted casting which is secured to the handle, and which has a ratchet formed upon its outer side, and a clamping-bolt which passes through the casting, the ratchet-plate, and the end of the beam, as will be more fully described hereinafter.

The object of my invention is to devise a means by which the beam can be so adjusted as to cause the plow to run either shallow or deep, without having to do anything more than to simply loosen the bolt.

Figure 1 is a perspective of the plate, which is to be secured to the side of the beam. Figs. 2 and 3 are perspectives of the casting, which is secured to the handle, taken from opposite sides. Fig. 4 is a vertical section of the two parts and the end of the beam. Fig. 5 is a perspective of my invention complete, showing it applied to a plow-beam, the beam and handle being shown in dotted lines.

A represents a suitable ratchet-plate, which is to be attached to or inserted in the side of one end of the beam, so that the ratchet-teeth will be on its outer side. Secured to the inner or outer side of the handle, according as the plow is right or left handed, and which extends down below the beam, is the casting B, which has a series of ratchet-teeth, D, formed on its side where it comes in contact with the ratchet-plate A. These teeth do not extend in a line with the casting, but run at an angle thereto, as is shown. Made through the casting is the diagonal slot G, through which the head of the clamping-bolt passes. On that side of the casting which comes next to the handle is made a suitable recess or channel along the sides of the slot, so that the head of the bolt can move freely back and forth along the slot without coming in contact with the handle, to which the casting is secured by means of bolts which pass through the holes I.

The clamping-bolt is passed through the casting before the casting is secured to the handle, and then the bolt is passed through the ratchet-plate and the rear end of the beam and receives a nut on the other side. Whenever it is desired to so adjust the beam that the plow shall run shallow or deep, it is only necessary to loosen the nut on the end of the clamping-bolt, then press outward upon the handle, so as to detach the teeth of the casting from the ratchet-plate, and then move the rear end of the beam so that the ratchet-plate will rise or fall upon the teeth of the casting, and then tighten the screw upon the bolt. On a left-hand plow the slotted casting is secured to the inside of the handle; but in a right-hand plow it is secured on the outer side of the other handle by a reverse of the pattern.

It will be seen from the above that it is not necessary to remove a single part for the purpose of adjusting the beam, and that there are no parts which are liable to become broken or get out of order.

I am aware that plow-beams have been adjusted vertically at their rear ends by means of slotted and ratcheted plates upon the handles and standards of the plows; but in no case has there been a slotted plate with ratchets on one side at an angle thereto, secured to the side of the handle, and a second ratcheted plate inserted in the side of the beam, as above described.

Having thus described my invention, I claim—

The combination, with the beam and handle of a plow, of the slotted casting B, having ratchet teeth formed on its side at an angle thereto, the ratchet-plate A, and the clamping-bolt, substantially as described.

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

HIRAM OSCAR KERNS.

Witnesses:

E. J. CRAWFORD,

J. A. THOMPSON.