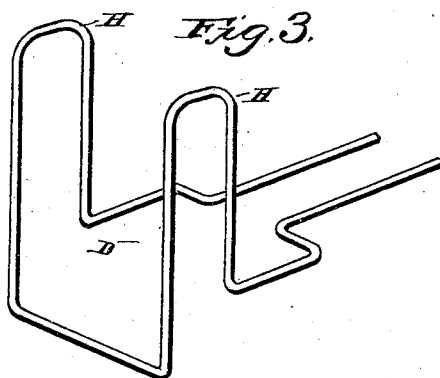
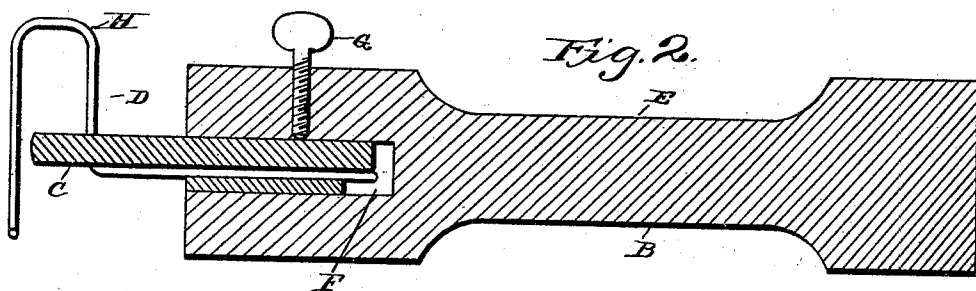
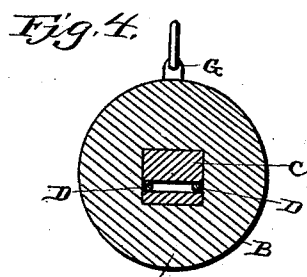
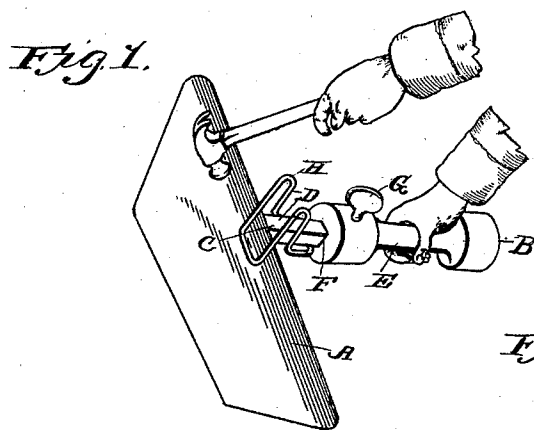


(No Model.)

A. HOFFLAND.
PLOW SHARPENING DEVICE.

No. 416,166.

Patented Dec. 3, 1889.



Witnesses

E. H. Hartman,
R. J. Marshall

By his Attorneys,

Alexander Hoffland

C. A. Snow & Co.

Inventor

UNITED STATES PATENT OFFICE.

ALEXANDER HOFFLAND, OF ALLIANCE, NEBRASKA, ASSIGNOR OF ONE-HALF
TO JOHN S. CARMAN, OF SAME PLACE.

PLOW-SHARPENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 416,166, dated December 3, 1889.

Application filed August 23, 1889. Serial No. 321,767. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER HOFFLAND, a citizen of the United States, residing at Alliance, in the county of Box Butte and State of Nebraska, have invented a new and useful Plow-Sharpener Device, of which the following is a specification.

My invention relates to improvements in plow-sharpening devices; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved device, showing its position on a plowshare. Fig. 2 is a longitudinal section, and Fig. 3 is a detail perspective view. Fig. 4 is a transverse section.

The plowshare A is of the usual or any preferred construction.

My improved sharpening device comprises a handle B, a die C, and a spring-clamp D. The handle B may be of any desired size, and consists of a metal bar having a cylindrical portion E, which is grasped by the hand, and it is provided in one end with a socket F, in which the die C is mounted. The die is held in the socket and at the proper point, so as to project the desired distance from the end of the handle by a set-screw G, which is mounted transversely in the end of the handle and bears on the die. The spring-clamp D consists of a spring-wire, which has its central portion bent into the U-shaped arm shown at H, which is adapted to rest on the upper side of the plowshare. From the ends of this U-shaped portion the wire is carried inward and then downward, so as to form loops or bends adapted to engage the edge of the plowshare, and from the said loops or bends the ends of the wire are carried inward to the handle and inserted in the socket F. The ends of the spring are clamped against the wall of the socket by the die, and the spring is thereby firmly secured in its place.

In practice the plow to be sharpened is inverted, and the spring-clamp is engaged over the edge of the share, so as to bring the die against the under side of the share and to hold the device in position while in use. The plowshare is then given a sharp blow by a

hammer or other suitable tool at a point directly over the die, and the concussion causes the die to move over the share toward the edge of the same, and thereby remove a part of the surface of the share, so as to reduce the edge. The device is readily shifted along the edge of the share as each part is sharpened, so that the entire edge can be quickly and easily reduced to the desired degree.

It will be observed that I have produced an extremely simple device, which can be manufactured at a slight cost and which can be easily manipulated. The die can be readily adjusted in and out of the socket, and may be entirely removed when it requires sharpening.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A plow-sharpening device comprising a handle, a die carried thereby, and a spring-clamp secured to the handle and adapted to engage the edge of the plowshare, as set forth.

2. The combination of the handle having a socket in one end, the die adjustably secured in said socket, and the spring-clamp secured in the socket and adapted to engage the edge of the plowshare, as set forth.

3. The combination of the handle having a socket in one end, the spring-clamp having its ends inserted in said socket, the die fitted in said socket and bearing on the ends of the spring-clamp, and the set-screw mounted transversely in the handle and bearing on the die, as set forth.

4. The combination of the handle, the die secured thereto, and the spring-clamp secured to the handle, and consisting of a spring-wire having its central portion bent into a U shape, the bends or loops extending from the said U-shaped portion and the ends extending from the said loops to the handle, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALEXANDER HOFFLAND.

Witnesses:

HANS P. LARSON,
DAVID PETERS.