

(No Model.)

G. H. ORTHWEIN.  
SPADE ATTACHMENT.

No. 493,110.

Patented Mar. 7, 1893.

Fig. 1.

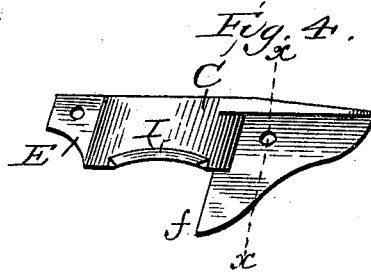
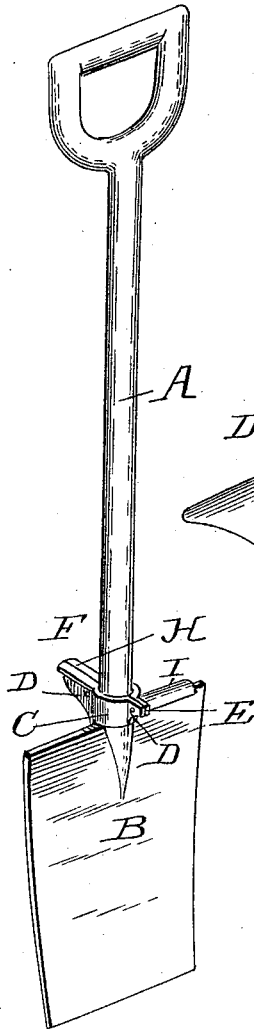


Fig. 2.

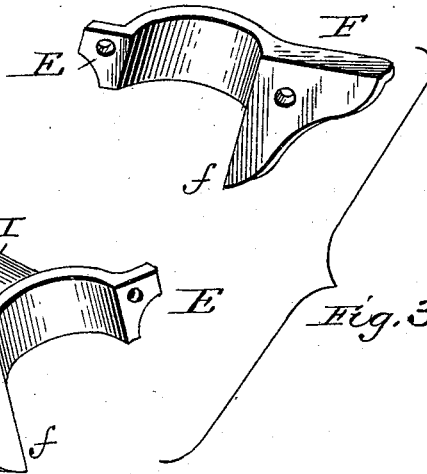
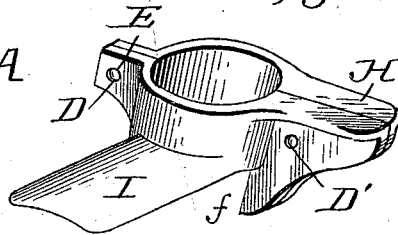
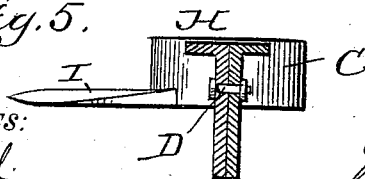


Fig. 3.

Fig. 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE H. ORTHWEIN, OF BROKEN SWORD, OHIO, ASSIGNOR OF ONE-HALF  
TO JEREMIAH F. ORTHWEIN, OF SAME PLACE.

## SPADE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 493,110, dated March 7, 1893.

Application filed October 3, 1892. Serial No. 447,670. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. ORTHWEIN, a citizen of the United States, and a resident of Broken Sword, in the county of Crawford and State of Ohio, have invented certain new and useful Improvements in Spade Attachments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a spade equipped with my improved attachment. Fig. 2 is a perspective view of the attachment, removed from the spade. Fig. 3 is a perspective view of the two parts or sections of the attachment, showing the same separated from each other. Fig. 4 is a side view of the attachment; and Fig. 5 is a cross section on line *x—x* in Fig. 4.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to digging or ditching attachments to spades; that is to say: a device adapted to be fastened to the handle of the spade, just above the blade, and in such position that the operator, when digging or ditching, can place his foot upon it so as to bring the weight and heft of his body to bear upon the blade when this is being forced into the ground during the operation, for example, of digging tile drains; and my improvement consist in the combination with a spade of the specific attachment or device which will be hereinafter more fully described.

Referring to the drawings, the letter A designates the handle, and B the blade of a spade suitable for digging and ditching.

My attachment is composed of two parts, made, preferably, of malleable iron or wrought iron, and forming, when placed together, a ring-shaped socket, C, for the insertion of the handle, A. The two parts or sections of this socket are clamped firmly upon and around the handle, A, by means of nutted bolts, D and D', which are inserted, respectively, through the ears, E, and laterally projecting brackets, F. Each bracket has a laterally projecting flange or top part, so that the two,

when placed together, will form a flat bearing, H, of such length and width that the operator can easily place his foot upon it. The inner sides of the brackets, F, are extended down below the socket, C, so as to form abutments, *f*, which bear against the handle, thereby bracing the brackets and the bearing, H, so that the same cannot easily be bent. On one side, the socket, C, is provided with a laterally extending slightly curved plate, I, which overlaps the upper side of the blade, B, on one side. This projection, I, serves the two-fold purpose of forming an additional support or rest for the device, if the socket, C, should slip, and it also forms a bearing or support upon which the operator may place his foot in forcing down the blade into the ground. In some positions it may be inconvenient for the operator to place his foot upon the support, H, in which case he can avail himself of the bearing, I, which is of sufficient width to give a firm bearing for the foot so as not to cut the sole of the boot or shoe.

It will be observed that this device is very simple and inexpensive in construction, and that it can be readily applied to any spade in a few moments. When so applied, it greatly facilitates the operation of cutting ditches, because the operator has the choice of two footholds by which to force the spade blade into the ground.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination with a spade of the device herein described, cast in two parts, and comprising, when placed together, the socket, C, ears, E, brackets, F, having downward extensions, *f*, and top flanges forming the bearing, H, and laterally projecting plate, I, adapted to overlap the spade blade on one side; substantially as and for the purpose herein shown and described.

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

GEORGE H. ORTHWEIN.

Witnesses:

C. H. NOBLET,  
WILLIAM ULMER.