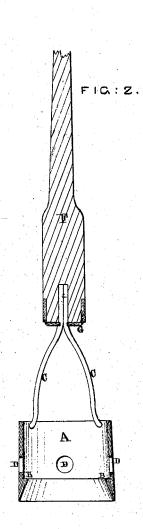
B.B. Herrich,

Fost Hole Thyger.

No. 112,454. Entented Mar. 9. 1891.

FIG: 1.



HITHESSES To Fo Joung) Joseph Marts Bryant B. Herrick Inventor By David a Burr atty

United States Patent Office.

BRYANT B. HERRICK, OF DECATUR, MICHIGAN.

Letters Patent No. 112,454, dated March 7, 1871.

IMPROVEMENT IN POST-HOLE DIGGERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, BRYANT B. HERRICK, of Decatur, in the county of Van Buren and State of Michigan, have invented an Improved Post-Hole Digger, of which the following is a specification.

Nature and Objects of the Invention.

The first part of my invention relates to the construction of a tubular post-hole digger or hollow spade with a series of perforations in the sides thereof, and with an inner offset or shoulder formed a little above its lower cutting edge to catch and retain the dirt until it is removed from the post-hole.

The second part of my invention relates to the flat-

The second part of my invention relates to the flattening of one side of the digger so that it may be used to square the post-hole, if desired, and also as a shovel in filling in the hole when the post is set.

Description of the Accompanying Drawing.

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Figure 2, a central longitudinal section thereof.

General Description.

A is the tubular hollow spade or post-hole digger, made of a cylindrical form, but having about one-fourth of its circumference flattened from end to end to present a plane surface, as illustrated in fig. 1 of the drawing. This instrument may be made of castiron or of steel; when made of the latter, so as to possess a degree of elasticity, I prefer to split or separate it longitudinally at some one point, so as to allow it to open slightly under pressure.

Upon and entirely around the inner periphery of this hollow spade I form an offset or inwardly-projecting shoulder, B, a short distance above its lower end, and bevel off the metal from the edge of said offset down to the outer face of the instrument, at its lower end, so as to impart thereto a sharp cutting-edge, as illustrated in fig. 2. By means of this offset B the dirt forced up within the spade A is retained therein and prevented dropping out until the instrument is withdrawn from the ground, and in some manner operated upon to remove its charge.

To facilitate the retention of the dirt within the instrument I furthermore perforate its sides, as shown at D D in the drawing, so that the edges of said perforations, engaging the dirt, which will naturally expand thereinto more or less, will serve to support the entire mass and prevent it from slipping out accidentally.

The tubular spade A, thus constructed, is united to a suitable handle, F, of wood or metal, (by preference the former,) by means of three or more rods, C C C, united at one end to form a common bar or shank, E, and spreading thence to equidistant points in the upper end of the tubular spade, to which they are firmly secured.

The bar or shank E is threaded to screw up into the lower end of the handle F, a cap or washer, G, being first screwed down upon the shank, so as to form a shoulder, against which the lower end of the handle will find a bearing and support when said shank E is screwed up therein, as illustrated in fig. 2.

In operation, the spade is forced down vertically into the earth until its interior is filled. It is thereupon withdrawn, its interior offset B and perforations D D preventing the inclosed mass of earth from dropping out when it is removed. The charge of earth, having been carried to any desired point, is forced from the spade and emptied, by striking the spade upon the ground or against any suitable object, or by blows thereon with a small mallet, which in either case will so loosen and displace the inclosed mass as to cause it to drop out very readily. With the flattened side of the implement the sides of the hole cut in the ground may be squared, when desired, and this form of the tubular spade adapts it for use as a shovel under any circumstances, and especially in refilling the post-holes.

I claim as my invention—

The interior offset B formed in the lower end of a tubular spade or post-hole digger A, substantially as and for the purpose herein set forth.

Witnesses: BRYANT B. HERRICK.
HARRY C. CHURCH.

WILLIAM MEAD.