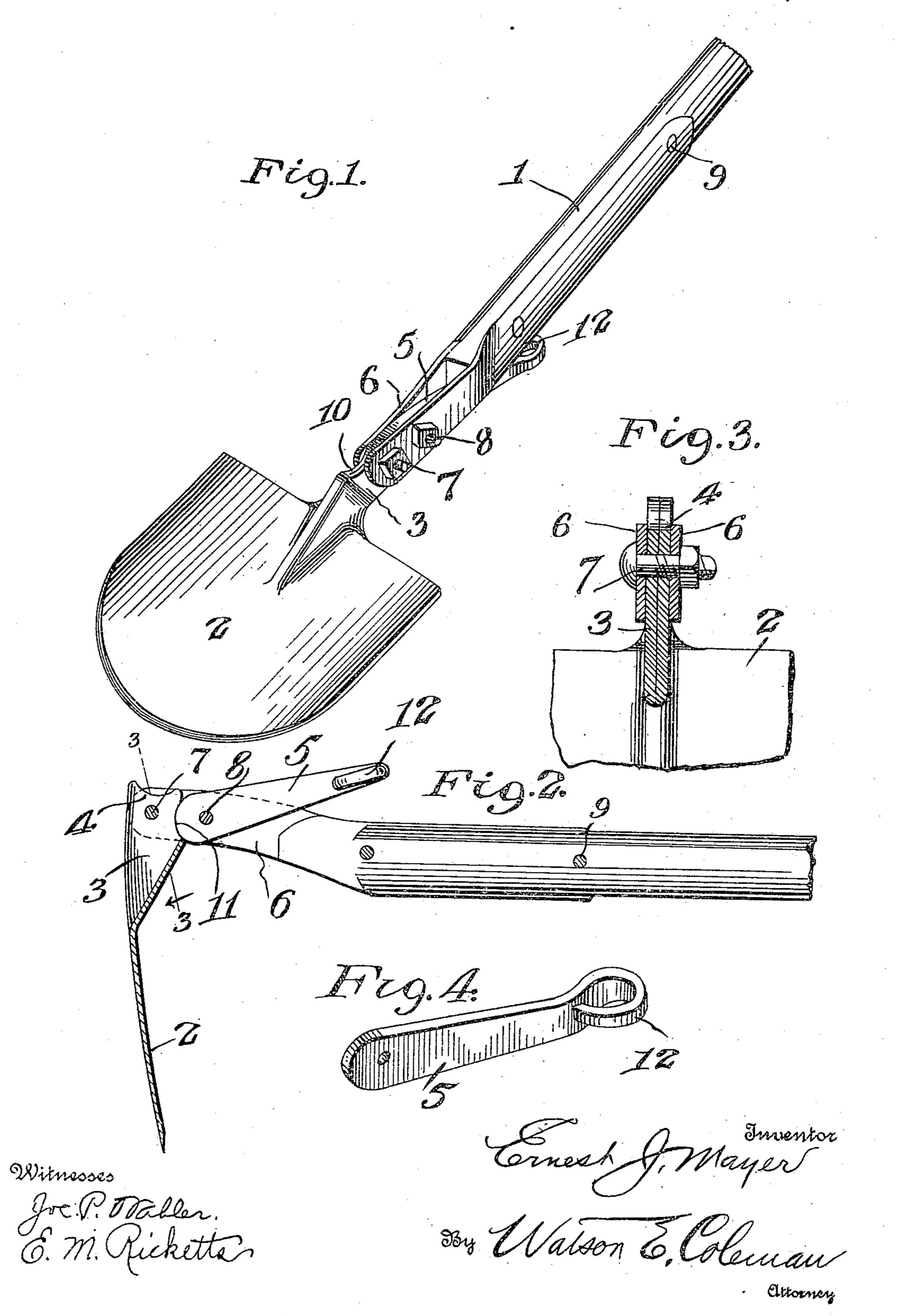
E. J. MAYER. TOOL HEAD CLAMP. APPLICATION FILED SEPT. 30, 1909.

951,324.

Patented Mar. 8, 1910.



UNITED STATES PATENT OFFICE.

ERNEST J. MAYER, OF UNDERCLIFFE, COLORADO.

TOOL-HEAD CLAMP.

951,324.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed September 30, 1909. Serial No. 520,258.

To all whom it may concern:

Be it known that I, Ernest J. Mayer, a citizen of the United States, residing at Undercliffe, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Tool-Head Clamps, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in clamping devices for holding tools in different angular positions with respect to a handle, whereby a tool such as a spade may be converted into a hoe, or tools such as a pitch fork may be converted into a rake.

The object of the invention is to provide a simple and inexpensive device of this character which will rigidly secure the tool in adjusted position with respect to the handle, and which may be quickly and easily operated to release or fasten the tool.

With the above and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing in which—

Figure 1 is a perspective view of one embodiment of my invention showing it uniting a spade head or blade to a handle so that the device may be converted into a hoe; Fig. 2 is a longitudinal section showing the parts adjusted for use as a hoe; Fig. 3 is a detail section taken on the plane indicated by the line 3—3 in Fig. 2, and Fig. 4 is a perspective view of the cam or eccentric lever.

Referring more particularly to the drawings, 1 denotes a suitable handle and 2 a tool which may be a spade head or blade, a pitch 40 fork head, etc. Said tool has a shank 3 formed with one or more curved seats 4 to receive a cam or eccentric clamping lever 5, whereby the tool may be rigidly clamped to the handle 1. When the latter is made of 45 wood as shown its outer or lower end has secured to its opposite sides metal straps 6, between which the shank 3 and lever 5 are arranged and mounted on pivots 7, 8, as clearly shown in Fig. 2. As here shown the 50 straps 6 have their inner portions curved transversely to conform to the curvature of the handle 1 and secured by transverse fastenings 9, while the outer ends of said straps 6 are offset laterally and have flat parallel

portions to receive the pivots 7, 8. When 55 the tool 2 is in the form of a spade blade, the shank 3 is formed integral with it by forming the central portion of the upper edge of the metal blade-plate with a comparatively broad tongue and then folding such tongue 60 upon itself as shown at 10 to reinforce and strengthen the shank produced thereby. The cam or eccentric seats 4 are shown as disposed in planes approximately at right angles to each other so that the blade or tool 65 2 may be disposed either in substantial longitudinal alinement with the handle 1 as shown in Fig. 1, or substantially at right angles thereto as shown in Fig. 2. The clamp lever 5 is pivoted nearer to one of its ends 70 which is shaped to form a cam 11 to enter one of the seats 4, and the other or long end of said lever has its extremity bent upon itself to provide a finger loop 12 as shown more clearly in Fig. 4.

From the foregoing it will be seen that my invention provides an exceedingly simple and practical tool head clamping device, by means of which a tool may be securely held in either of one or more operative posible tions or angles with respect to its handle, and that when fastened by the device, the tool will be held rigidly against casual displacement.

Having thus described the invention what 85 is claimed is:

A device of the character described comprising a handle, spaced straps projecting from one end thereof, a tool head having a plate formed at its upper edge with a tongue 90 folded upon itself to provide a projecting shank, said shank being disposed between the ends of said strap and formed with curved notches disposed in planes at right angles to each other, a pivot passed through 95 said straps and said shanks, a second pivot passed through said straps, and a lever mounted on said second pivot and having a cam-shaped end to enter either one of said notches in the shank to frictionally clamp 100 the tool in adjusted position.

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

ERNEST J. MAYER.

Witnesses:

J. B. Harris, O. C. Taylor.