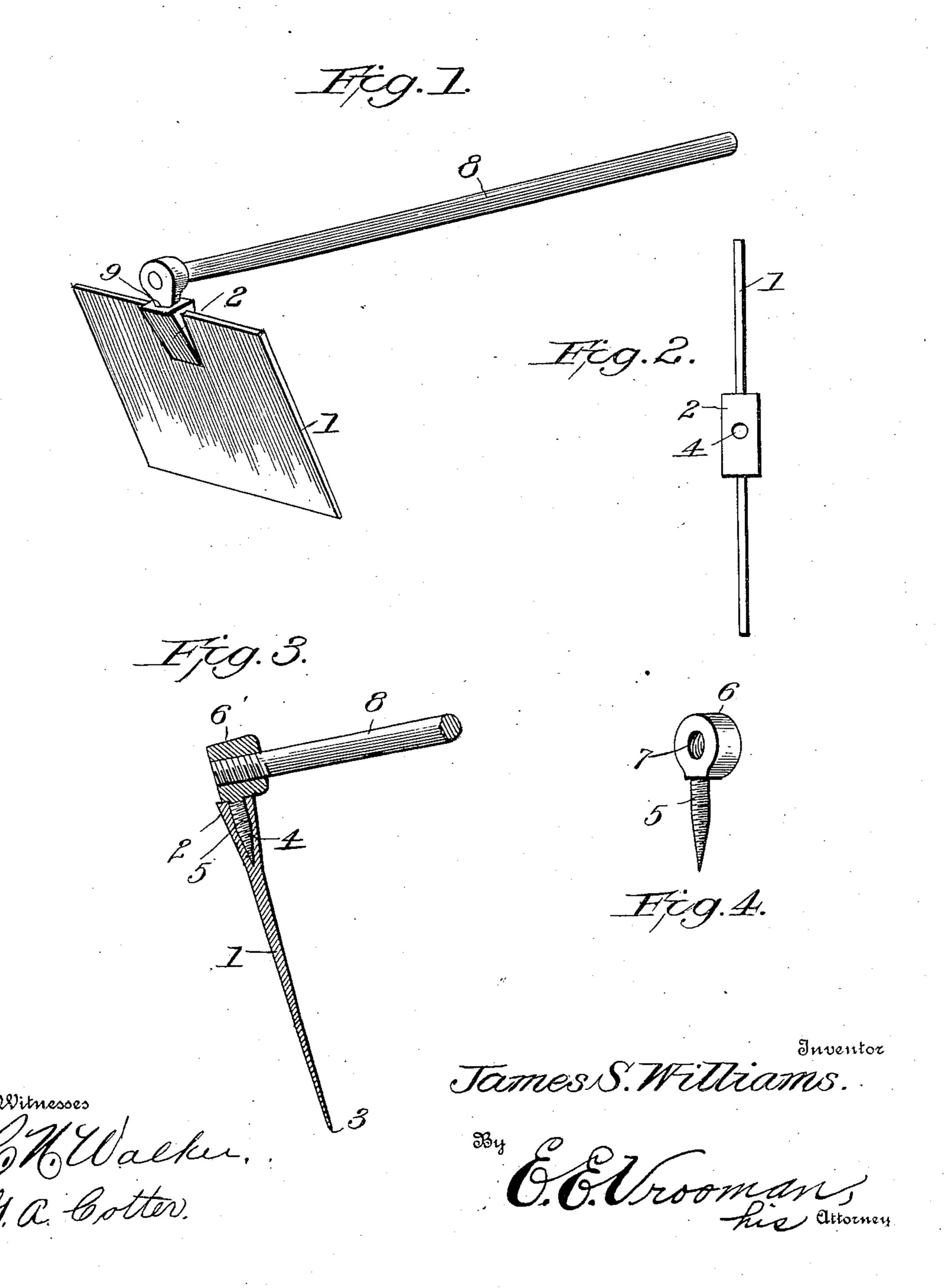
PATENTED OCT. 15, 1907.

No. 868,148.

## J. S. WILLIAMS.

HOE.

APPLICATION FILED JUNE 7, 1907.



# UNITED STATES PATENT OFFICE.

JAMES SHELBY WILLIAMS, OF WOOL MARKET, MISSISSIPPI.

### HOE.

No. 868,148.

## Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed June 7, 1907. Serial No. 377,808.

To all whom it may concern:

Be it known that I, James Shelby Williams, a citizen of the United States, residing at Wool Market, in the county of Harrison and State of Mississippi, have invented certain new and useful Improvements in Hoes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in hoes, and has for its object the provision of means for facilitating the attachment of the handle and blade together.

Another object of the invention is the improvement of the construction of a hoe, the parts of which can be easily separated for shipment or transportation, and which hoe is simple in construction and comparatively inexpensive to manufacture.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a perspective view of a hoe constructed in accordance with the present invention. Fig. 2 is a top view of the blade of the hoe. Fig. 3 is a transverse, central, sectional view of the blade and the eye and showing a portion of the handle. Fig. 4 is a perspective view of the eye.

Referring to the drawings by numerals, 1 designates the blade, which is substantially the same thickness throughout its entire dimension, except at its upper middle portion, which portion is provided with a vertical wedge-shaped or tapering reinforcing rib 2. A cutting edge 3 is, preferably, formed upon the lower edge of the blade 1.

The vertical rib 2 is widest at its upper end and converges towards its lower end until it is of the same thickness as the blade, whereby the blade 1 can be easily sunk into any material its entire height without the rib 2 interfering with the operation.

The vertical rib 2 is provided with a vertical aperture 4, which aperture 4 tapers towards its lower end and is serew-threaded for receiving the depending threaded stem 5 of the eye 6. The eye 6 is, preferably, annular shape, and is provided with a longitudinally-extending, threaded aperture 7, into which aperture is threaded the lower end of the handle 8. It is to be noted that, owing to the tapering structure of the stem 5 and the aperture 4, substantially the same amount of material

of the rib 2 surrounds the stem 5 throughout its entire · length, when positioned in the aperture 4, as clearly seen in Fig. 3. By reason of the structure of the aperture 4 and stem 5, the rib 2 is not weakened. This is of 50 importance in constructing a sectional hoe, because the strength of the hoe is an important feature, as well as its adaptability to be quickly disassembled for transportation or assembled when it is desired to use the same. The stem 5 is not of the same diameter as the 55 lower face of the eye 6, thereby providing a flat face overlapping the upper face 9 of rib 2 upon opposite sides of the stem 5, whereby any lateral or sidewise strain upon the blade will not cause a strain entirely upon the stem 5, but the strain or load will be dis- 60 tributed to a certain amount upon the lower, flat face of the eye 6.

#### What I claim is:

1. A hoe, comprising a blade provided upon its upper portion with a wedge-shaped rib, said rib provided with a 65 vertical threaded aperture, an eye provided with a depending threaded - stem and with a longitudinally - extending, threaded aperture, the stem threaded into the aperture of said rib, and a handle threaded into the aperture of said eye.

2. A hoe, comprising a blade provided with a rib, said rib provided with a threaded aperture, an eye provided with a threaded stem, the stem threaded into the aperture of said rib, and a handle positioned in said eye.

3. A hee, comprising a blade provided near its central 75 upper portion with a vertical rib of greater width at its upper end and converging towards and of the same thickness as the blade at its lower end, the blade of substantially the same thickness throughout its entire dimension, an eye provided with a longitudinally-extending, threaded 80 aperture and with a depending threaded stem, the stem converging towards its lower end, said eye provided with a flat lower face, said rib provided with a vertical threaded aperture, the aperture converging towards its lower end, and the rib of substantially the same thickness upon op- 85 posite outer sides of the vertical aperture throughout the entire depth thereof, the stem threaded into said aperture and having the flat face of the eye overlapping portions of the upper face of the rib around the stem, and a detachable handle threaded at its lower end into the aperture of 90 said eye.

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

JAMES SHELBY WILLIAMS.

## Witnesses:

WM. Robinson,

J. L. WYATT.