

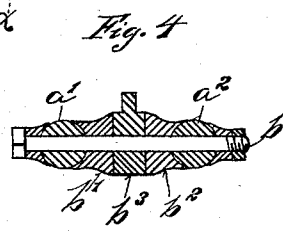
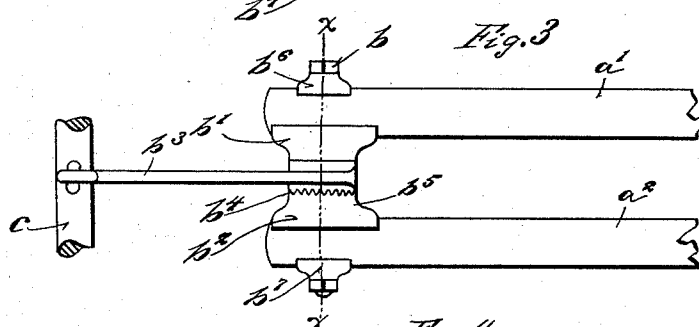
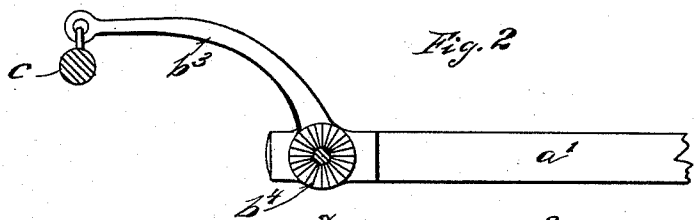
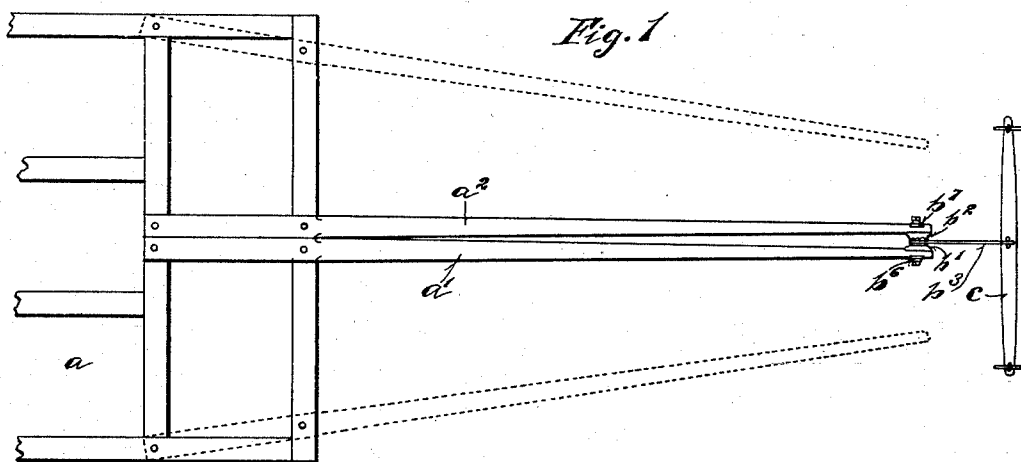
(No Model.)

H. BROOME.

EXTENSION PIECE FOR COMBINED POLES AND SHAFTS.

No. 522,962.

Patented July 17, 1894.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HENRY BROOME, OF SPRINGFIELD, OHIO, ASSIGNOR TO AMOS WHITLEY, OF SAME PLACE.

## EXTENSION-PIECE FOR COMBINED POLES AND SHAFTS.

SPECIFICATION forming part of Letters Patent No. 522,962, dated July 17, 1894.

Application filed April 9, 1894. Serial No. 506,933. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY BROOME, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful improvements in Extensions for Combined Poles and Shafts, of which the following is a specification.

My invention relates to improvements in devices adapted to be so used as to be adjustable to form either a pole or shafts to which one or more horses may be hitched, as desired.

The object of my invention is to provide an adjustable extension to be used in connection with a device of this character when the same is adjusted to form a pole or tongue. In devices of this character the parts when adjusted to form shafts are necessarily shorter than when they are used together to form a tongue. Various means have been employed for lengthening out the parts when so employed, but the means heretofore employed for this purpose have been complicated and incapable of the proper adjustment to render them thoroughly successful. To overcome these difficulties and to provide a simple adjustable pole extension has been the object of my invention. I attain these objects by the constructions shown in the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention shown attached ready for use. Fig. 2 is a side elevation of the same with some of the parts removed. Fig. 3 is a plan view on a larger scale of the same, and Fig. 4 is a transverse sectional view on the line *x x* in Fig. 3.

Like parts are represented by similar letters of reference in the several views.

In the said drawings, *a* represents the frame of any device to which the pole or tongue is adapted to be secured; the particular frame represented being a portion of an agricultural implement, for use with which the device is especially adapted.

*a' a'* are adjustable pieces adapted to be secured to the frame *a*, as shown in Fig. 1 in full lines or in dotted lines, to form either a pole or shaft, as desired; the change from one to the other being made by simply moving the parts *a' a'* to their proper positions and

bolting or otherwise securing them to the frame *a*, as shown.

Now, to provide for properly extending the parts when put together to form a tongue, I provide each of the pieces *a' a'* near its outer extremity with a lateral opening, through which is adapted to extend a clamping bolt *b*. Upon this bolt *b*, and between the respective parts *a' a'*, I place sleeves or collars *b' b'*, which are formed with a concave bearing adapted to fit the convex side of the tongue pieces *a' a'*; and between these sleeves or collars *b' b'*, is placed a projecting arm *b<sup>3</sup>*, which carries at its outer end a neck yoke *c*. This projecting arm *b<sup>3</sup>* is preferably provided with a hub or sleeve, one side of which is serrated, as shown at *b<sup>4</sup>*, the serrations being adapted to engage with similar serrations *b<sup>5</sup>* on the collar or sleeve *b<sup>2</sup>*. Suitable washers *b<sup>6</sup> b<sup>7</sup>* are provided on the outside of the tongue pieces *a' a'*, also on the bolt *b*, and the parts clamped together by means of said bolt.

By the construction thus described it will be seen that a simple pole extension is provided. The arm *b<sup>3</sup>* may be connected permanently to the neck yoke, if desired, so that by placing the arm and its parts onto the tongue, the neck yoke is secured directly thereto.

By having the serrated faces, as described, on one side of the arm, means are provided by which the extension may be adjusted up or down, as desired, to secure the proper working position of the tongue and adjust it to the different work to be performed.

If desired, serrations may be placed on each side of the arm to engage with each of the sleeves or collars, but the preferable construction is to have the serrations on one side only, as when the serrations are placed in each of the collars more or less difficulty is experienced in having them fit perfectly on each side unless the parts are expensively fitted up, and it is desirable that they be simply and cheaply made.

Having thus described my invention, I claim—

1. A tongue extension for a combined pole and shafts which consists essentially of a pivoted arm arranged between the pole pieces, sleeves or collars between said arm and pieces, and a clamping bolt for securing the said parts

together in different positions of adjustment, substantially as specified.

2. The combination with the tongue pieces, of an extended arm having a neck yoke connected thereto, sleeves or collars arranged between said tongue pieces and adapted to engage therewith, and engaging serrations on said arm adapted to engage with similar serrations on one or both of said collars, and a clamping bolt for uniting the parts together, substantially as specified.

3. The combination with the tongue pieces, of the arm pivoted between said pieces, a neck yoke connected to said arm, sleeves or collars

having concave sides adapted to fit on said tongue pieces, a hub on said arm adapted to be clamped between said sleeves, engaging serrations between said hub and one or both of said sleeves, and a clamping bolt extending through said tongue pieces, sleeves and arm on which said arm is pivoted, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 31st day of March, A. D. 1894.

HENRY BROOME.

Witnesses:

ROBERT C. RODGERS,  
CHAS. I. WELCH.