

(No Model.)

T. B. LYON.

CONVERTIBLE SINGLE AND DOUBLE TREE.

No. 566,523.

Patented Aug. 25, 1896.

Fig. 1.

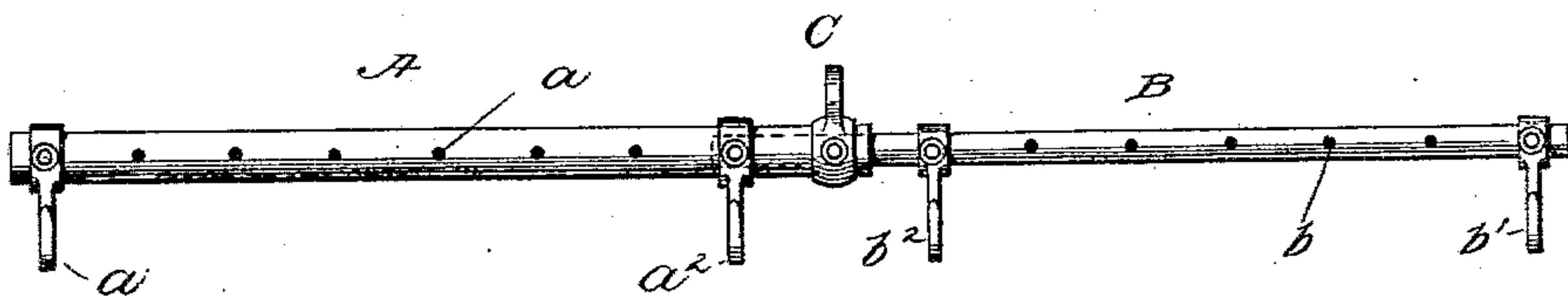


Fig. 2.

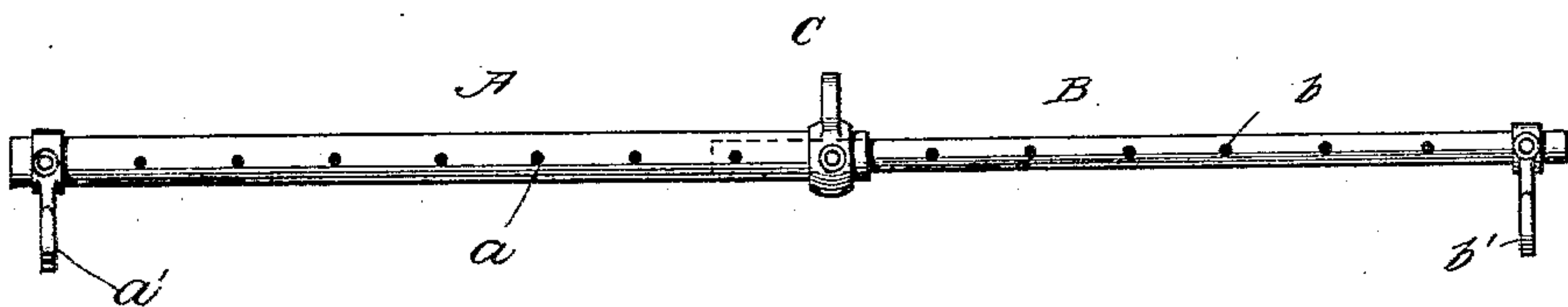


Fig. 3.

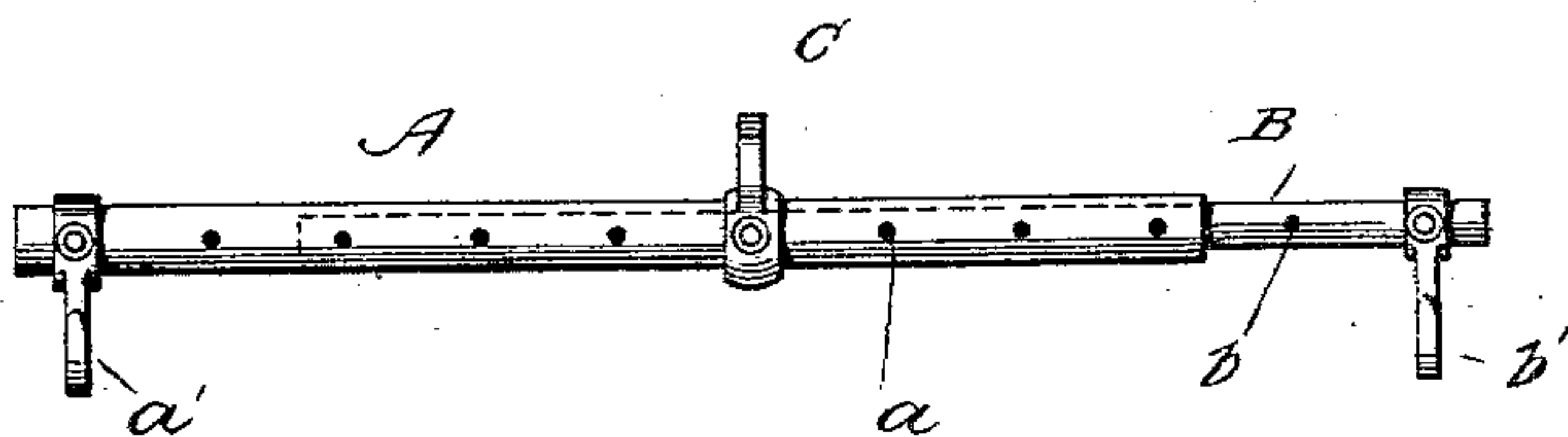
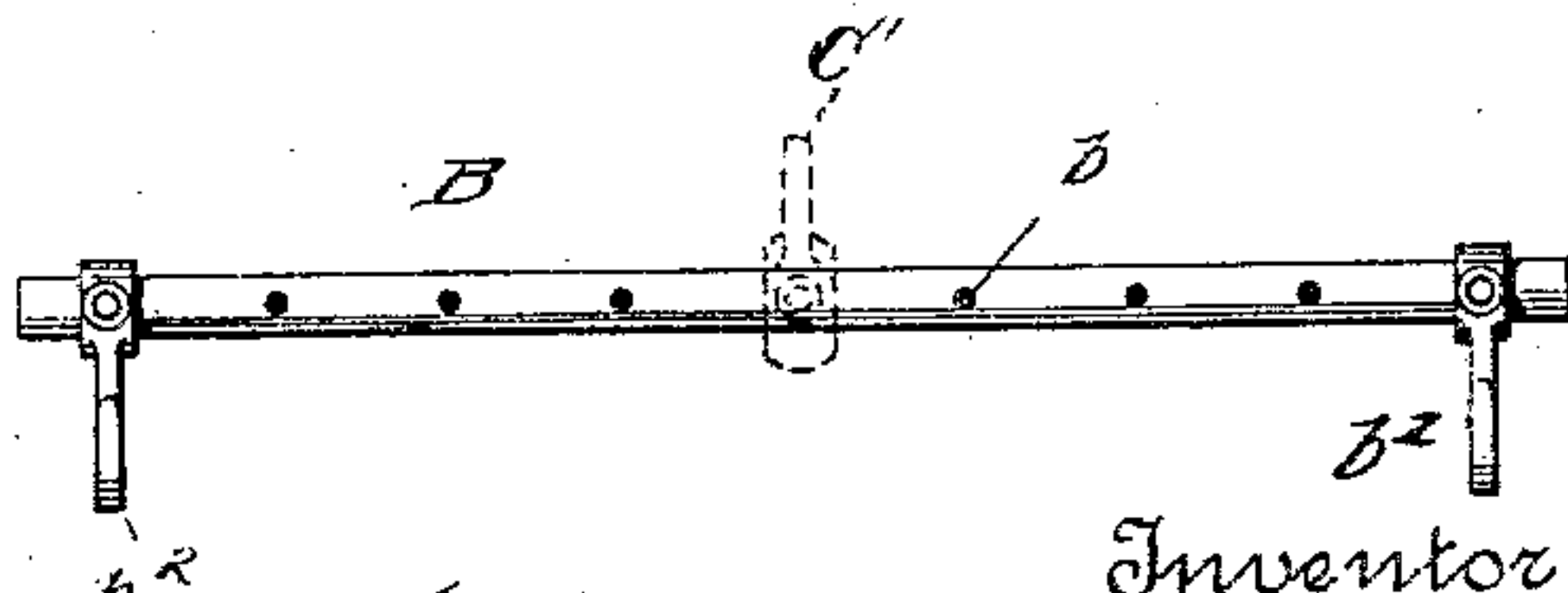
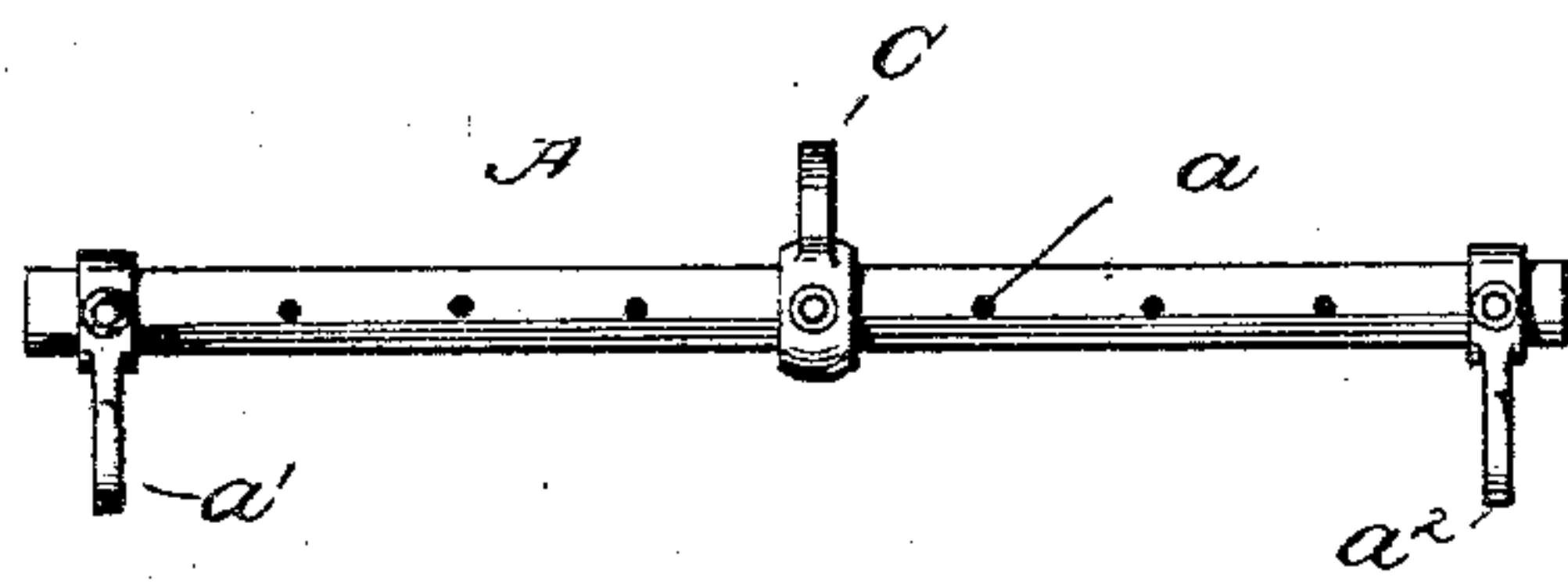


Fig. 4.



Witnesses

Edw. D. Durall Jr.  
Charles E. Riordon

Inventor

Thomas B. Lyon  
By Butterworth & Dowell  
his Attorney



# UNITED STATES PATENT OFFICE.

THOMAS BASCOM LYON, OF CHILESBURG, KENTUCKY.

## CONVERTIBLE SINGLE AND DOUBLE TREE.

SPECIFICATION forming part of Letters Patent No. 566,523, dated August 25, 1896.

Application filed April 3, 1896. Serial No. 586,065. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS BASCOM LYON, a citizen of the United States, residing at Chilesburg, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Convertible Single and Double Trees; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to singletrees or doubletrees, but more particularly to a combination singletree and doubletree which may be readily converted into different draft devices especially designed for agricultural uses, such as plowing corn, cotton, tobacco, &c., and for other purposes.

The primary objects of the invention are to provide a strong, efficient, and durable convertible singletree and doubletree which, when converted into either a singletree or a doubletree, may be easily lengthened or shortened at will, and which may be capable of various adjustments to adapt it to the requirements of the use to which it is to be put.

The invention consists essentially of a combination singletree and doubletree which is made extensible and convertible into either a singletree, a doubletree, or a combination of both doubletree and two singletrees.

The invention will first be hereinafter more particularly described with reference to the accompanying drawings forming a part of this specification, and then pointed out in the claims at the end of the description.

Referring to the drawings, in which similar letters of reference are used to denote similar parts of the device, Figure 1 represents a plan of the convertible device adapted to take the place of an ordinary doubletree and two singletrees. Fig. 2 is a plan of the device converted into a doubletree. Fig. 3 is a plan of the device converted into a singletree, and Fig. 4 is a plan view of the device converted into two independent singletrees.

The device or implement consists essentially of two telescopically-connected bars or rods A B, each having a series of perforations or bolt-holes therein, so arranged that the perforations in the smaller or insertible bar B may coincide with the perforations in

the larger portion or tube A for the insertion of a pin or bolt, by which the two parts may be secured together at any desired point along the length thereof.

The perforations in the larger section are denoted by the letter *a*, while those in the smaller section are denoted by the letter *b*, and the spaces between the perforations of one bar are preferably of the same length as the spaces between the perforations of the other bar, so that when the smaller bar is housed within the larger the perforations in the two may coincide.

The larger bar or section A is provided with a clip or clevis C and a hook or hooks *a'* *a*<sup>2</sup>, while the smaller section is provided with a hook or hooks *b'* *b*<sup>2</sup>, the several hooks and clips being adjustably and removably secured by bolts passing through the perforations in the sections, so that the device may be converted or extended as may be desired.

In Fig. 1 the device is shown as an extensible bar adapted to take the place of an ordinary doubletree and two singletrees combined in one structure for use in working two horses to one plow, or for other purposes. This change is made by slipping the inside section B out near the end of the larger section and placing the clip C at the end of the larger section, with the two hooks *a'* and *a*<sup>2</sup> of the section A and the hooks *b'* and *b*<sup>2</sup> of the section B arranged as shown in said figure. The bolt that secures the clip C serves also to secure the two sections together. The device thus converted may be used also as a doubletree by simply loosening and permitting the inner hooks *a*<sup>2</sup> *b*<sup>2</sup> to swing down out of the way, (or allowing them to remain attached without being used,) or they may be removed, so as to convert the device into the doubletree shown in Fig. 2 or the singletree shown in Fig. 3.

To convert the device into a singletree the parts are arranged the same as in Fig. 2, except that the smaller section B is slid inward into the section A nearly its entire length and the clip C is slid along the section A and secured between the ends of the larger section A at a point which brings it midway between the hooks *a'* and *b'* on the two sections, the bolt which secures the clip being also used in this case to secure the two sections together. I thus provide a short and very strong single-



tree, (which may be made even shorter, if desired, by sliding the inner section farther inward and shifting the hooks and clip to correspond to the required arrangement,) which  
5 will be found useful in plowing up close to corn and tobacco.

When two singletrees are desired, the smaller section is slipped out and disconnected from the larger one, and an extra clip C' being provided for the smaller section, the two bars are  
10 thus converted into two independent singletrees, as shown in Fig. 4.

The sections of the convertible device may be made out of any suitable material, but preferably consist of metal tubes, which may be  
15 cast or otherwise formed according to common methods, so that the device may be manufactured at a very small cost. By forming the two sections out of cast or drawn tubes of  
20 steel it may be made very light yet very strong. The smaller section is preferably tubular, so as to combine lightness with strength, but may consist of a solid rod having perforations therein to receive the bolts by which the hooks  
25 and clip are secured thereon. The clips and hooks may be made out of any suitable metal.

The described construction comprises a very simple and inexpensive convertible draft device which may be easily and quickly changed  
30 from a singletree to a doubletree, or vice versa, or converted into a singletree and doubletree combined in a single composite structure, or into two independent singletrees (by merely providing an extra clip for the section which is  
35 normally used without such clip); and when the device is used in either capacity it possesses great strength and durability, and when used as a singletree or doubletree may be  
40 lengthened or shortened at will to adapt it to different requirements in use. The parts are also adapted to be manufactured in quantities, so that either a hook or a clip or a section of the device may be supplied for a broken or lost portion without the necessity or ex-  
45 pense incident to providing a new device.

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

1. A convertible and extensible singletree and doubletree composed of two sections telescopically arranged and adjustably secured  
50 together for lengthening or shortening the device; each section having a series of perforations or bolt-holes therein to receive fastening-bolts for uniting the sections and securing draft-hooks and clips thereto; one section being provided with a draft hook or  
55 hooks and with a clip for attachment to the device to be drawn and the other section being provided with a draft hook or hooks; whereby said sections with their hooks and clips may be secured together and so arranged  
60 as to form either a singletree or a doubletree, either of which may be lengthened or shortened at will, substantially as described.

2. A convertible draft device comprising an outer tubular section having a series of perforations therein, an inner section fitted to slide within the outer section and having a series of perforations therein coinciding with  
70 the perforations in the outer section when inserted therein; the outer section being provided with an adjustable clip and an adjustable and removable draft hook or hooks, and the inner section being also provided with a  
75 similarly-adjustable draft hook or hooks; said parts being detachably and adjustably connected together so that the device may be readily converted into either an extensible singletree or doubletree, or a combined double-  
80 tree and singletrees, or disconnected to form two independent singletrees, substantially as described.

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

THOMAS BASCOM LYON.

Witnesses:

R. W. ROSZELL,  
J. E. BATTAILE.