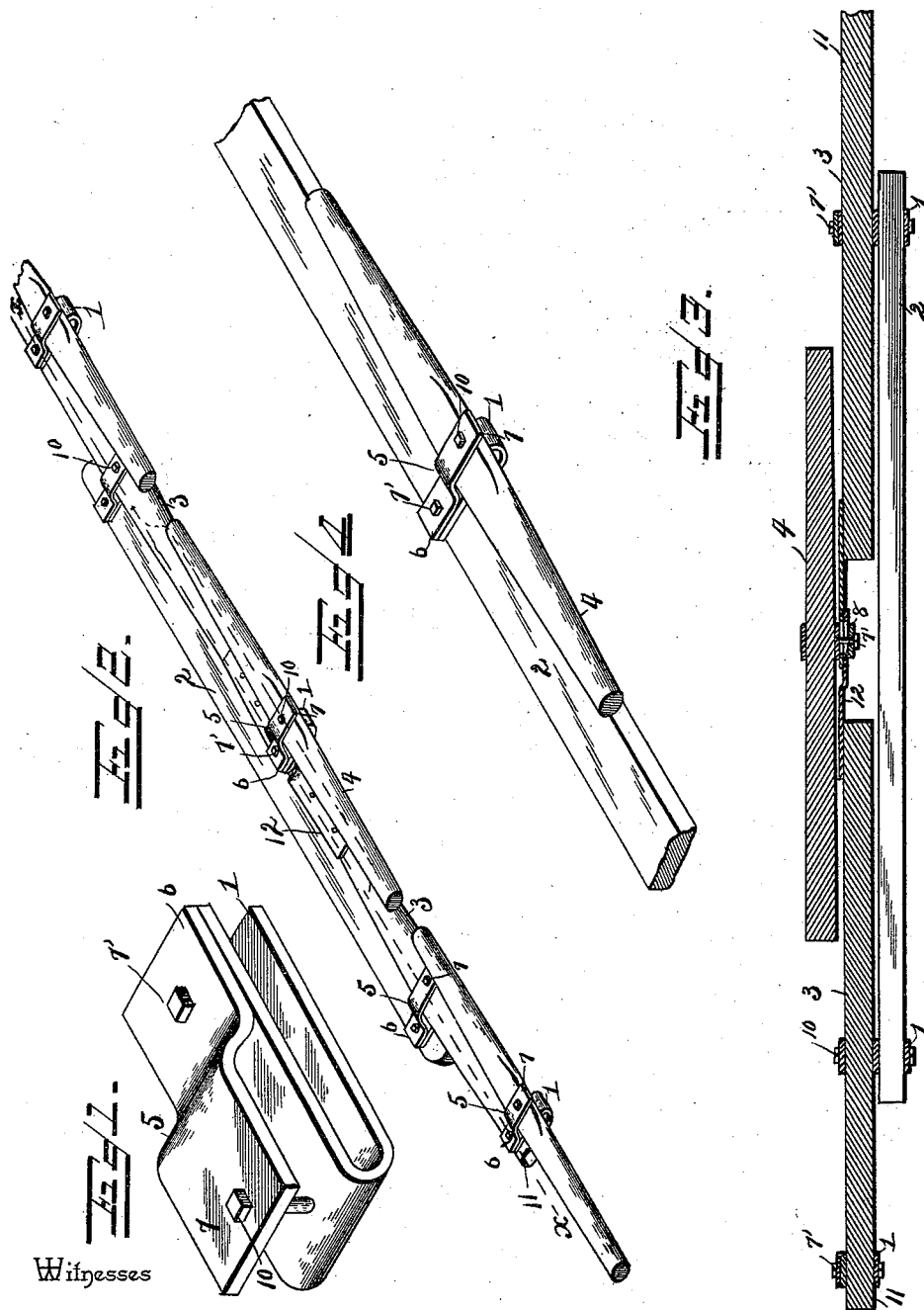


(No Model.)

E. H. SAWYERS.
WHIFFLETREE CLIP.

No. 490,683.

Patented Jan. 31, 1893.



Witnesses

W. C. Schneider.
Chas. S. Hoyer.

By his Attorneys,

C. H. Snow & Co.

Inventor

E. H. Sawyers.

UNITED STATES PATENT OFFICE.

ELDRIDGE H. SAWYERS, OF UNIONVILLE, IOWA.

WHIFFLETREE-CLIP.

SPECIFICATION forming part of Letters Patent No. 490,683, dated January 31, 1893.

Application filed August 11, 1892. Serial No. 442,828. (No model.)

To all whom it may concern:

Be it known that I, ELDRIDGE H. SAWYERS, a citizen of the United States, residing at Unionville, in the county of Appanoose and State of Iowa, have invented a new and useful Clip for Single and Double Trees, of which the following is a specification.

This invention relates to clips for single and double trees and also to the formation of said parts in connection with the clip, and has for its object to simplify the construction of devices of this character and strengthen the connection of the several parts, and with this object in view, the invention consists of the construction and arrangement of the parts thereof as will be more fully hereinafter described and claimed.

In the drawings:—Figure 1 is a perspective view of the improved form of clip. Fig. 2 is a perspective view of a double-tree showing the improved construction applied in connection therewith. Fig. 3 is a sectional view on the line *x. x.* Fig. 2. Fig. 4 is a perspective view of the device shown in connection with the single-tree.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1, designates the lower embracing or supporting portion of the clip which consists of a U-shaped plate adapted to be fitted over the end of the main tree 2 of a double tree, or the central portion 3, of a single-tree 4, or it may be employed in connecting the single-trees in a double-tree, as fully shown in Fig. 2. A brace 5, is secured to the top portion of the U-shaped plate and consisting of a rear flat arm 6 and a front raised end 7. The rear flat arm 6, has a bolt or rivet 7^x, passed therethrough and through openings 8, in the rear portion of the said U-shaped plate and said bolt or rivet may also form a means of securing the clip in position or serve as a brace therefor. The U-shaped plate is also secured in position by a bolt or rivet, extending through opposite sides thereof and the portion of the single or double tree confined between parts of the same. In some instances this central rivet or bolt 9, may be positioned either in advance of the location shown or in rear of the same, and the rearmost bolt or rivet 8, may be employed

alone to serve the function of the said rivet or bolt 9. Through openings in the front part of the U-shaped plate and the upwardly bent end 7, of the brace 6, a bolt 10, is passed, which forms the pivotal support for the single tree either when used alone or as a part of a double tree, it being seen that the upward bent end 7 of the brace 6 forms a space with the front part of the U-shaped plate to receive the central portion of the single tree in either the double tree construction or when said single tree is used alone to allow full movement of the latter and to properly mount the same in position.

It will be understood that the clip as set forth may be applied at any desired point and used in any manner and for any purpose for which it is applicable. When said clip is used at the center of a double tree or draft equalizer as shown in Fig. 2, the inner ends of single trees 11 thereof are formed or provided with inwardly extending oppositely situated plates 12 having their inner ends slotted and overlapping in order to cause the slots thereof to align, and in this instance the said slotted plates 12 engage the pin 9 which is centrally located as more clearly shown in Fig. 3. This arrangement of parts provides for a central connection for a centrally located single tree and acts efficiently to equalize the draft, as will be observed when the said central single tree is drawn forward the ends of the single trees 11 are also drawn forward and being of a loose connection to the plates 12 will easily and readily resume their normal positions when the draft on the outer ends of the single trees 11, equalize the draft at the inner ends thereof. This provides a very useful and advantageous construction and arrangement of parts as will be readily seen and understood by those skilled in the art.

The bolt 10 in connection with the clip would naturally become worn even though, it be made of hard metal and the brace 6 is attached to the U-shaped plate in such manner that it may be removed and a new bolt 10 supplied and mounted in position whenever found necessary and the parts readily rearranged in proper position. It will be seen that the clips employed in the central line of draft will be especially beneficial for employment with double trees of light vehicles as it

will not permit a pulling or twisting on one side or the other but directly in a straight line.

Other advantages will appear from time to time to those using the device and need not be further enlarged upon herein.

It will be understood that the clip herein set forth may be equally well used in manufacturing light work for buggies single or double trees or wherever else the use of the clip may be found desirable and applicable.

Having thus described the invention, what is claimed as new is:—

1. In a device of the character set forth, a clip consisting of a lower U-shaped plate bent into form and extending the entire length of the device, and an upper brace having its rear end secured to the upper part of said plate by a bolt that extends therethrough and through the said plate and the front part of the same bent upward and having a bolt extending therethrough and through the front of the said plate, said brace and plate being separated and bent into proper form and the bolts

forming pivots and means of attachment for the parts of the whiffletree, substantially as described.

2. In a device of the character set forth, the combination of singletrees having slotted plates secured to the inner ends thereof, said slotted plates having the slotted portions thereof overlapping each other between the inner ends of the said singletrees, and another singletree having the clip attached to the center thereof and embracing the said overlapped portions of the slotted plates and having a bolt passing therethrough and through the slots of said plates, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELDRIDGE H. SAWYERS.

Witnesses:

J. C. POWELL,
G. M. NEAL.