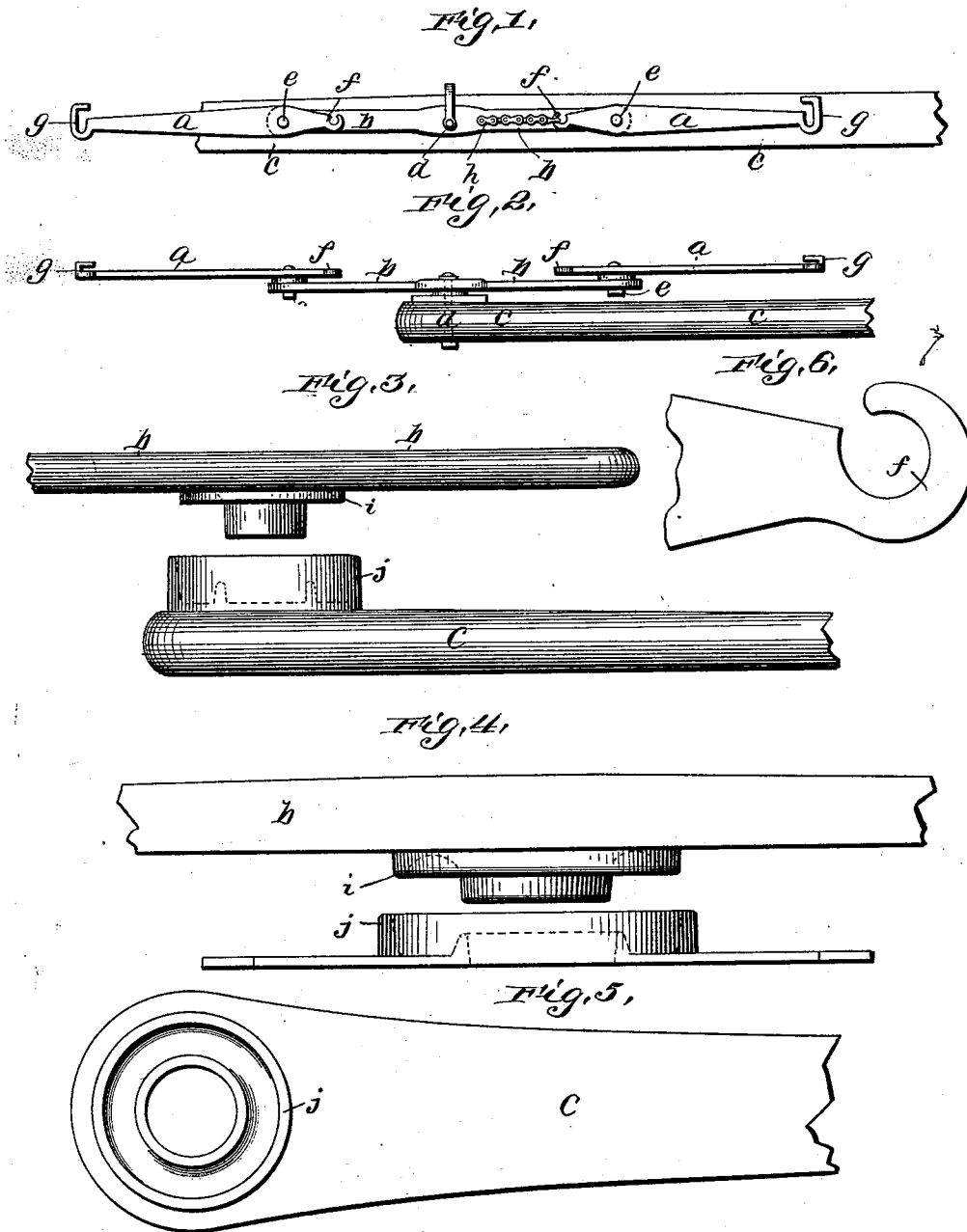


(No Model.)

J. C. H. HOBBS,
WHIFFLETREE.

No. 521,028.

Patented June 5, 1894.



Witnesses: -
W. W. Spurlak
A. D. Roberts

Inventor:
James C. H. Hobbs

UNITED STATES PATENT OFFICE.

JAMES C. H. HOBBS, OF SALEM, NEBRASKA.

WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 521,028, dated June 5, 1894.

Application filed June 22, 1893. Serial No. 478,545. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. H. HOBBS, a citizen of the United States, and a resident of Salem, in the county of Richardson and State of Nebraska, have invented a new and useful Improvement in Whiffletrees, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to an improvement in whiffletrees, to be used on wagons, carriages, &c., and has for its object, the attainment of a perfect relation between the horse and the base line of draft, whether alone or in a span, and the perfect distribution of the draft upon the horse or horses.

My invention consists of a compound, adjustable whiffletree, composed of sections mounted on a base plate, pivotally attached to the evener or cross-piece at its center, said sections being provided with tug-hooks at their outer ends for the attachment of the tug lines and with similar hooks at their inner ends, which are connected together by means of a chain or strap for limiting the movement of said sections relative to the base plate.

It further consists in certain details of construction and arrangement, hereinafter described and claimed.

In the accompanying drawings:—Figure 1 represents a plan view of my improved whiffletree complete, a small portion of the chain which connects the inner adjacent ends of the whiffletree sections being broken away to better illustrate the device. Fig. 2 is a front elevation of the same with the chain removed. Fig. 3 is an enlarged view, in elevation, of the pivotal plates, between the whiffletree sections and the base plate, and between the base plate and evener. Fig. 4 is an elevation similar to Fig. 3, showing the pivotal or center plates made independent of and separable from the parts to which they are intended to be attached. Fig. 5 is a plan view of one end of the evener, showing the lower center plate formed thereon. Fig. 6 is an enlarged view of the hook on the inner end of the whiffletree sections.

Similar letters refer to similar parts in the different figures of the drawings.

a, a, represent the whiffletree sections

proper, *b* the base plate and *c* indicates the evener which is centrally pivoted in the usual manner. The whiffletree sections *a, a,* are provided at their outer ends with tug-hooks *g,* as shown, for the attachment of the tug lines or traces, and at their inner adjacent ends, these sections are formed with other hooks *f,* to engage the end links of a chain *h,* which extends across over the pivot of the base plate connecting said sections and limiting the swinging movement of the whiffletree sections, in a manner that will appear. At a point intermediate the hooks *g* and *f,* the sections *a,* are pivoted to the outer swinging ends of the base plate *b,* as shown, and the base plate itself is pivoted at its center, at *d,* to the outer swinging end of the evener *c.* The sections *a,* and base plate *b* are, preferably, made of malleable iron, though, of course, they may be made of any suitable material.

i and *j* represent center or swivel plates, for giving a strong and durable pivotal connection between the parts *a, b* and *c,* one of said center plates, as *i,* being secured to the bottom of each section *a,* and to the bottom of the base plate *b,* and the other plate *j,* being secured to the upper faces of the whiffletree sections *a* and also the base plate *b.* These plates *i* and *j* are annular in form, and fit snugly, one within the other and they are firmly united and held by means of through bolts *e, e,* and *d,* as illustrated in the several figures of the drawings. These annular, center plates may be cast or struck up in any usual manner.

In Fig. 3, I have shown the plates *i* and *j* formed integrally with the base plate *b* and evener *c,* in which instance, of course, the said base plate and evener are made of metal. In case the parts should be made of wood, the center plates *i* and *j* are separately cast or struck up and then bolted or otherwise firmly secured to the base plate, evener, &c.

By means of the construction described, it will be seen that the whiffletree as a whole may turn and adjust itself easily to the angle of the horse; this keeps the horse in perfect relation to the base line of draft, the whiffletree holding the tug lines at a right angle thereto; also by means of the pivoted sections *a, a,* and the slack in the chain *h,* connecting the inner adjacent ends of said sec-

tions, the oscillations at the tug end of the whiffletree, produced by the lateral movements of the horse are distributed and absorbed and all undue and sudden strain on the horse is entirely relieved and done away with.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 1. A compound, adjustable whiffletree, consisting of two, separate, whiffletree sections, *a, a*, a common base-plate *b*, to which said whiffletree sections are pivoted, and the chain *h*, connecting the inner, adjacent ends of said
15 sections, in combination with a centrally piv-

oted evener *c*, to one end of which said compound whiffletree is pivotally secured, in the manner and for the purpose described.

2. A compound, adjustable whiffletree composed of two arms or sections *a, a*, a base plate *b*, and a chain *h*, connecting the inner adjacent ends of the whiffletree sections, in combination with the annular center plates *i* and *j*, interposed between the sections *a* and base plate *b* and between the base plate *b* and
25 evener *c*, as and for the purpose set forth.

JAMES C. H. HOBBS.

In presence of—

J. R. WILHITE,
O. W. BROWN.