

No. 681,947.

Patented Sept. 3, 1901.

G. G. F. BOSWELL.
SPRING CLEVIS FOR WHIFFLETREES.

(Application filed Jan. 7, 1901.)

(No Model.)

FIG. 1.

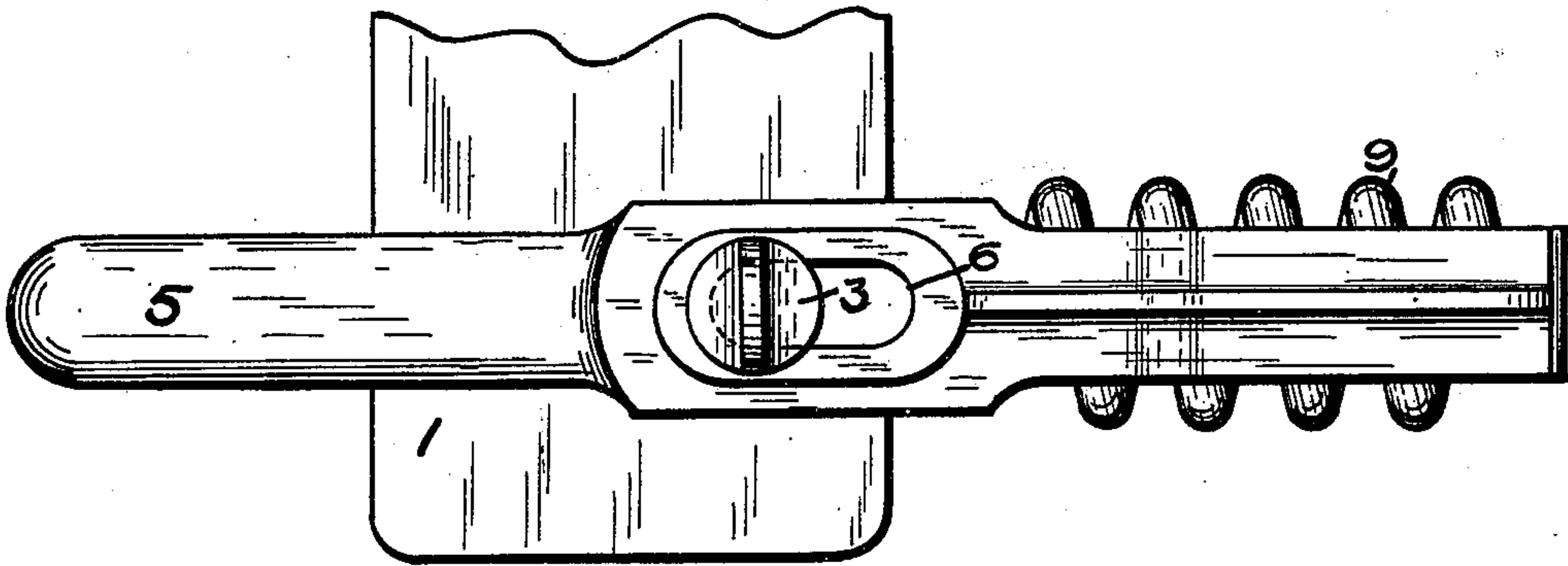
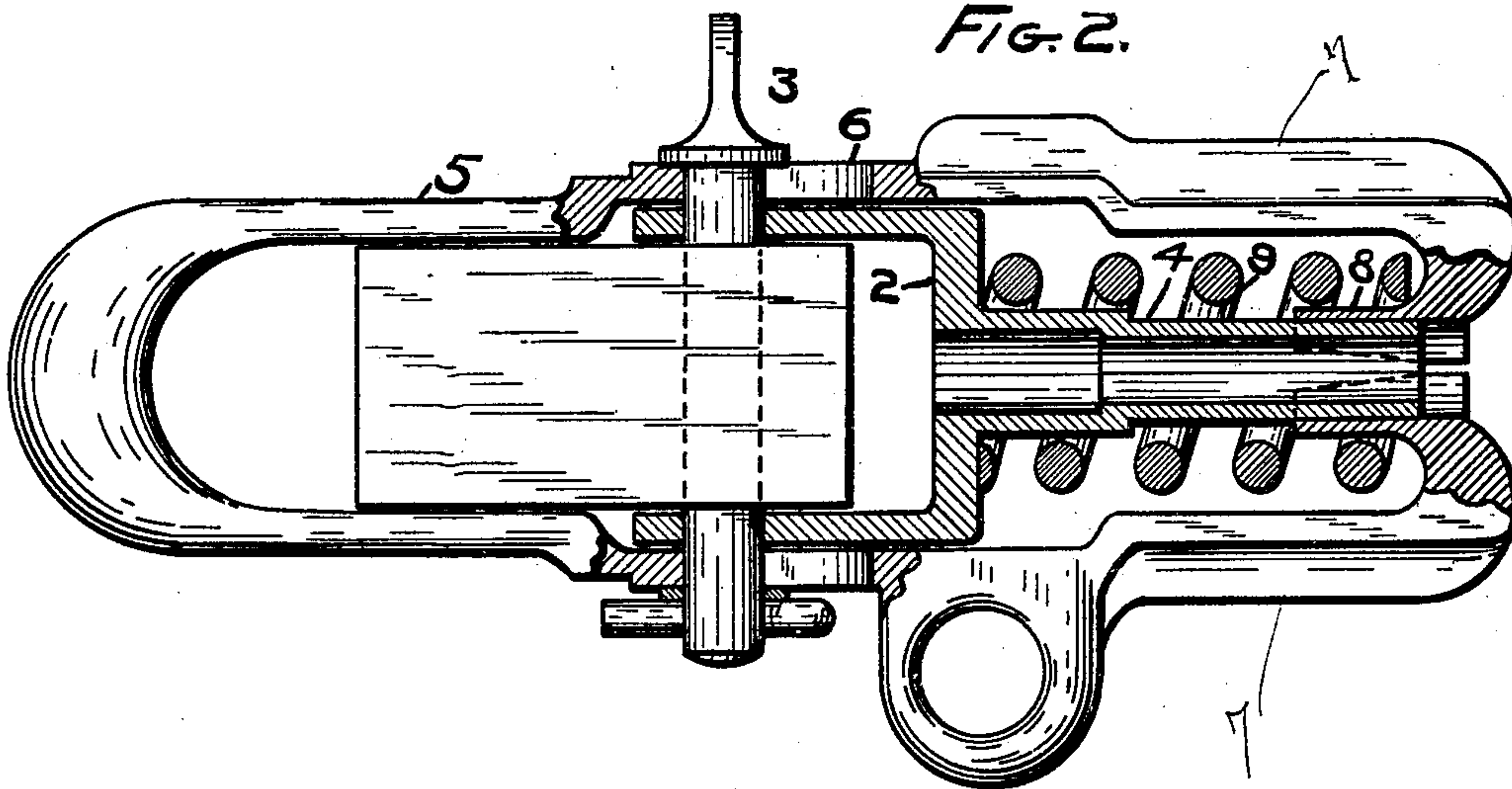


FIG. 2.



WITNESSES:

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GEORGE G. F. BOSWELL, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO VIRGIL H. LOCKWOOD, OF SAME PLACE.

SPRING-CLEVIS FOR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 681,947, dated September 3, 1901.

Application filed January 7, 1901. Serial No. 42,368. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. F. BOSWELL, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Spring-Clevis for Whiffletrees; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

One object of this invention is to provide a practical form of spring-clevis for whiffletrees that can be conveniently placed on whiffletrees either at the ends or in the middle thereof by the farmer or teamster without the assistance of a blacksmith or any skilled workman or without any change in the whiffletree.

Another object is to provide a spring-clevis that can freely oscillate on the whiffletree without twisting or affecting the clevis. Another object is to make such a clevis light, yet capable of resisting the strain brought on it by any team hitched to it.

To accomplish the above objects, I make a clevis of two members, one within the other, the inner member having a yoke extending above and below the whiffletree, whereby it is pinned to the whiffletree so ample space may be left between the whiffletree and the head of the yoke to permit horizontal oscillation of the clevis. The yoke is secured to a guide-rod on which the spring is mounted. The outer member of the clevis surrounds the inner member and the whiffletree and has slots in the top and bottom for the whiffletree-pin to extend through, which holds the outer member in place or permits the independent movement of the members. One end of the outer member is divided, with the free ends thereof turned within the spring and surrounding the guide-rod of the inner member, whereby the spring will resist said independent movement and the strain of the spring and parts will cause the spring to hold the two arms or parts of the outer member more tightly against the guide-rod of the inner member as such strain increases. These and the other features of my invention will more fully appear from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a plan of the

clevis on the end of a whiffletree. Fig. 2 is a side elevation of the same with parts in vertical section.

In the drawings a whiffletree 1 is shown made in the usual form, with a pin-hole at the usual place near the end.

One of the two members of the clevis consists of the yoke 2 and guide-rod 4. The yoke is formed of a head and two arms extending therefrom at a right angle, one above and one below the whiffletree, with a hole in each, through which the pin 3 extends, whereby the inner member is secured to the whiffletree. The arms of this yoke are long enough to leave sufficient space between the surface of the whiffletree and the head of the yoke that the clevis may freely oscillate horizontally to accommodate the device to the uneven draft of the team. The guide-rod and spring-support 4 extend centrally from the head of the yoke, which is here shown tubular to make it lighter, although that is not necessary.

The outer member 5 of the clevis surrounds and embraces the inner member and whiffletree, with one arm above and one below the same. Said member at one end is closed to hold a ring or other draft attachment. Such end of the said outer member extends far enough from the whiffletree to permit the free oscillation of the clevis horizontally. Said outer member has the slots 6 near the middle, both above and below, through which the pin 3 extends, whereby the outer member is held in place and the movement of the members is guided and limited. The other end of said outer member 5 is divided and open and the free ends thereof have the arms 7, that embrace the guide-rod 4 to furnish a guideway for said rod in its reciprocation. Said arms 7 have oppositely-placed inward extensions 8, that likewise partly envelop the guide-rod 4 and about which the coils of the spiral spring 9 fit. Said spring surrounds the guide-rod 4 and the extensions 8 and at one end presses against the yoke 2 of the inner member and at the other end against the arms 7 of the outer member of the clevis. Therefore said spring holds the extensions 8 and the arms 7 down upon the guide-rod 4 and prevents them from spreading when subjected to strain. The extensions 8 increase in

thickness in the direction of the movement of the spring when under strain, so that increased strain of the device causes the end coil of the spring to grasp more tightly the extensions 8 and press and hold the arms 7 in place against the guide-rod 4. In this manner great strength is obtained with light construction.

The two members of this clevis are preferably made of malleable iron in order to be strong, yet light, and so yielding that the clevis can be placed on a whiffletree between its ends, if desired. This is accomplished by the spreading of the free ends of the outer member 5 somewhat while pressing them over the whiffletree, so that the whiffletree enters between the arms of the outer member, after which the inner member and spring are inserted without difficulty and the free ends brought together against the rod 4 and held together by the end coil of the spring. To assist in placing the clevis over a whiffletree in this manner, the end surface of each of the arms 7 of the outer member is convex, so as to make a V-shaped opening between said arms 7 when the spring and yoke 2 are removed. This enables one to press a draft-ring into the clevis or to force the clevis over the whiffletree, the pressure on the flaring end of the clevis on the whiffletree in itself spreading them sufficiently.

I am aware of prior spring draft attachments having two spring-resisted members; but I know of no spring-clevis of the form and arrangement of mine or capable of the convenient placing and satisfactory use as that herein shown or so simple and cheap in construction.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A spring-clevis including an inner member with a yoke, an outer member embracing the yoke-shaped member, a pin for pivoting both members to a whiffletree, and a spring to resist the independent movement of said members.

2. A spring-clevis including an inner member with a yoke, an outer member embracing said yoke-shaped member and having slots therein, a pin for securing the yoke-shaped member to a whiffletree or other draft appli-

ance and which extends through the slots in the outer member, and a spring that resists the independent movement of said members.

3. A spring-clevis including an inner member composed of a guide-rod with a yoke at one end for pinning it to a whiffletree or other draft appliance, an outer member embracing said yoke and having at one end a guideway for said guide-rod, said members being independently movable, and a spring about said guide-rod that bears against the guiding end of said outer member to resist the independent movement of said members.

4. A spring-clevis including an inner member composed of a guide-rod with a yoke at one end for pinning it to a whiffletree or other draft appliance, an outer member embracing said yoke and divided at one end, said divided end of the outer member enveloping and forming a guide for said guide-rod, and a spring about said guide-rod acting between said inner member and the divided end of said outer member.

5. A spring-clevis including an inner member composed of a guide-rod with a yoke at one end for pinning it to a whiffletree or other draft appliance, an outer member embracing said yoke divided at one end, said divided end of the outer member enveloping and forming a guide for said guide-rod and having inward extensions about said guide-rod, and a spring placed about said guide-rod and the inward extension from the divided ends of the said outer member.

6. A spring-clevis including an inner member composed of a guide-rod with a yoke at one end for pinning it to a whiffletree or other draft appliance, a flexible outer member embracing said yoke and divided at one end, with a flaring opening to enable said outer member to be forced over the whiffletree or other draft appliance by spreading the divided ends thereof.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

GEORGE G. F. BOSWELL.

Witnesses:

V. H. LOCKWOOD,
LAURA HITT.