(No Model.)

W. H. BAKER.

CLEVIS AND PIN.

No. 389,493. Patented Sept. 11, 1888.

Fig. 1.

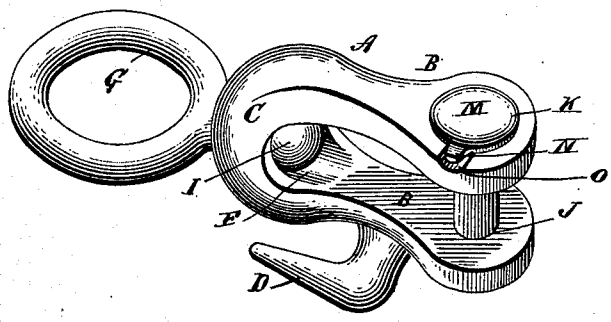


Fig. 2.

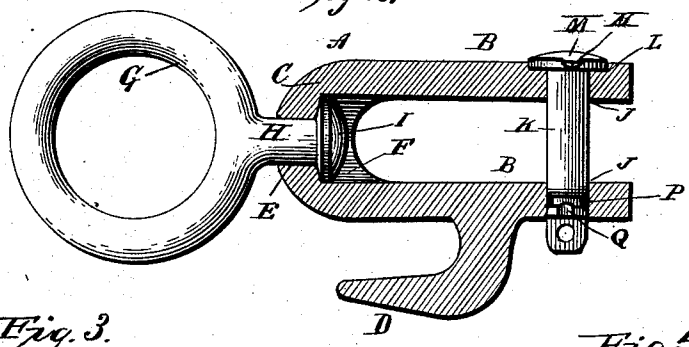


Fig. 3.

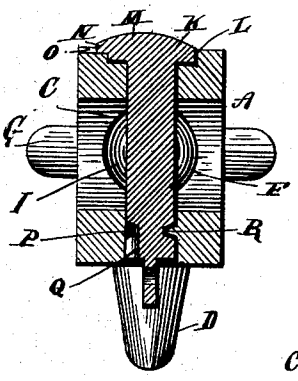


Fig. 4.

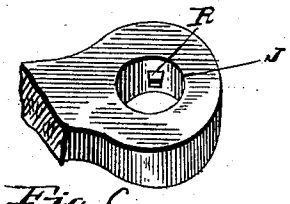


Fig. 5.

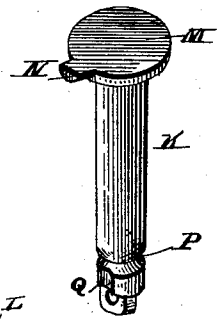
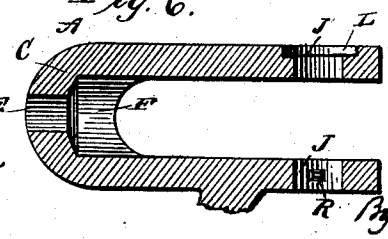


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

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CLEVIS AND PIN.

SPECIFICATION forming part of Letters Patent No. 389,493, dated September 11, 1888.

Application filed March 5, 1888. Serial No. 266,135. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BAKER, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Clevises, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in clevises, and the object I have in view is to provide a simple and durable device that may be readily and quickly connected or attached directly to a whiffletree, plow, drag, or other implement without the use of intermediate split links, rings, twisted links, or other devices usually employed, as will more fully hereinafter appear.

The invention consists in certain novel features of construction, which will be presently pointed out and claimed.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 represents a perspective view of my improved clevis complete; Fig. 2, an elevation, partly in section; Fig. 3, a transverse vertical sectional view; Fig. 4, a perspective view of a portion of the clevis; Fig. 5, a perspective view of the locking-pin detached; and Fig. 6, a longitudinal sectional view of the clevis proper detached.

Referring to the drawings by letters, A designates the body of the clevis, which is preferably cast in a single piece, and consists, essentially, of two parallel horizontal arms, B B, united at their forward ends by a rounded connecting portion or web, C, the lower one of these arms, B, being provided with a forwardly-extending hook, D, which is cast integral with the arm, and is made very strong and tapered off at its forward end. The web or connecting portion C is provided with a central horizontal aperture, E, which communicates with a cylindrical recess, F, formed in the inner wall of this portion C between the two arms B B.

The letter G designates a ring, which is provided with a radial extension or arm, H, the end of this arm being provided with a head or flange, I, as shown in Fig. 2. By means of this headed pin the ring G is pivotally or swivelly secured to the clevis A, the pin being passed through the aperture E, and its head I being formed on it in such a manner as to rest loosely in the recess F in the inner wall of the portion C. It will thus be seen that the ring is attached to the clevis proper in a permanent and positive manner, while at the same time the two parts may be turned independently of each other.

The rear free ends of the arms B B are provided with coincident vertical apertures J J, through which a headed pin, K, is passed, the upper surface of the upper arm surrounding the aperture in it being provided with a circular depression or recess, L, for the reception of the circular head M of the said pin. The head M of this locking-pin is provided with a radial lug or pin, N, projecting from its periphery, and preferably rounded on its under side. (Shown in Fig. 5.) In the upper surface of the arm B is a radial recess or short groove, O, which is adjacent to and communicates with the depression L, this recess O being for the purpose of receiving the lug N on the pin when the same is locked in position, as will presently be set forth. Formed near the lower end of the pin K is an annular groove, P, which extends entirely around the pin and communicates at one side with a short vertical groove, Q, which extends to the lower end of the pin, as clearly shown in Figs. 3 and 5. Projecting radially into the aperture J in the lower arm B is a lug or pin, R, which, when the locking-pin K is in place in the aperture, rests in the annular groove P in the lower end of the pin, as shown in Fig. 3. The lower end of the pin K is provided with a small hole, whereby, by means of a nail or piece of wire or any suitable instrument to be inserted in this hole, the pin may be readily turned so that it may be removed and the clevis detached from the plow or implement to which it may be connected. When it is desired to attach this clevis to a whiffletree, plow, or other similar implement provided with the usual apertures for a clevis, the pin K is dropped through the apertures J and through the holes in the implement. The pin is then turned until the vertical groove Q in the lower end thereof registers with the lug R, projecting into the lower aperture, J, when it is again dropped until the said lug rests in the annular groove P, when it is again turned partially around until the radial lug N on the head of the pin drops into its recess in the

upper surface of the upper arm, B. The pin is then locked securely in place against accidental displacement. The metallic arms B B, being connected together only at one end, are somewhat elastic or springy at their free ends, and this elasticity is utilized to assist in holding or locking the pin K in place, as follows: The pin is made such a length that when it is put in place in the apertures it is necessary to press the arms B slightly toward each other, in order to permit the lug R on the lower arm to pass into the annular groove P. Now, when the arms B are released, their tendency to spring apart will cause the rounded portion of the radial lug N on the head of the pin to press with considerable force upon the upper surface of the upper arm, and when the pin is turned until the lug N drops into its recess O the upward pressure of the arm is instantly removed from the lug by the arm assuming its normal position again. The rounded under surface of the lug N permits the same to be moved out of its recess with ease when the pin is to be removed. Thus, it will be seen that in order to remove the pin it is necessary to press the arms slightly toward each other and partially revolve the pin.

The hook D, formed on the lower side of the lower arm, B, is for the purpose of attaching the clevis to the chain of a drag, harrow, or other implement that is not provided with the usual aperture for a clevis. The object in swiveling the ring G (which is connected in the usual manner to the work-harness on the horse) is to permit the clevis to be turned freely and independently of it, whereby the use of intermediate twisted links and other connections usually employed between the clevis and the implement to which it is attached is entirely obviated.

It will be observed that I have a very simple and durable device which will be eminently useful, especially to farmers, as it may be attached instantly and without the use of tools or extra links to any farm implement or machine.

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

The combination of the clevis A, its upper arm being provided with a recess, O, which connects with the bolt hole, and the lower arm being provided with a lug, R, which extends into the bolt-hole therein, of the bolt K, having a lug, N, upon its head adapted to enter the recess O and lock the bolt against turning, the said bolt K being provided with an annular groove, P, and a connecting vertical groove, Q, these grooves engaging with the lug R of the lower bolt-hole and serving to secure the pin against withdrawal, substantially as described.

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

WILLIAM H. BAKER.

Witnesses:
CHAS. D. DAVIS,
C. D. JOST.