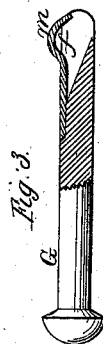
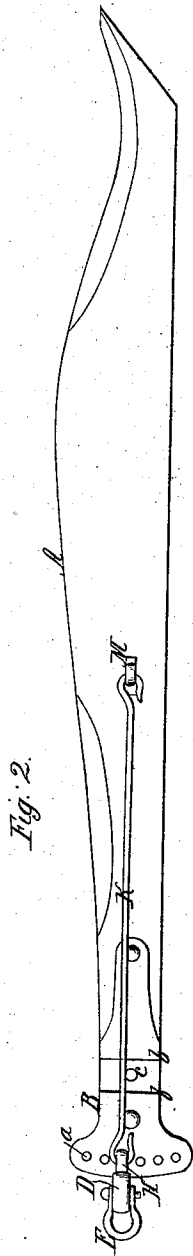
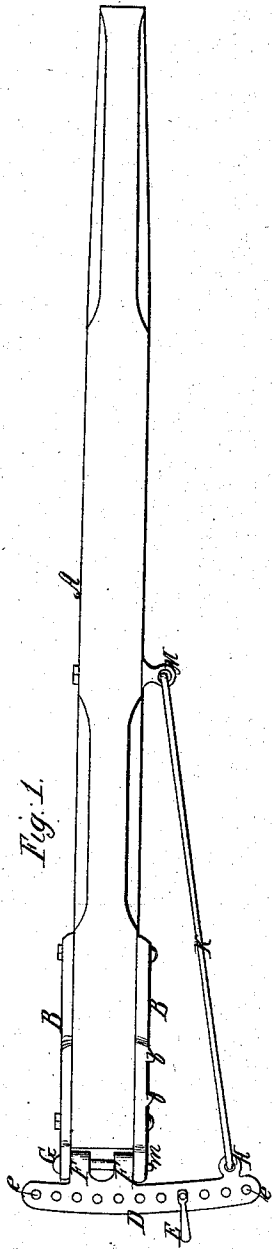


E. G. Matthews,

Flour Cleavis.

No. 87,421.

Patented Mar. 2, 1869.



Witnesses;
Thos. H. Dodge
D. L. Miller

Inventor;
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E. G. MATTHEWS, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO F. F. HOLBROOK.

Letters Patent No. 87,421, dated March 2, 1869.

IMPROVEMENT IN PLOW-CLEVISES.

The Schedule referred to in these Letters Patent and making part of the same.

Know all men by these presents:

That I, E. G. MATTHEWS, of Newton, in the county of Middlesex, and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Clevises for Plows and other agricultural implements; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan view of my improved clevis;

Figure 2 represents a side view of my improved clevis; and

Figure 3 represents a view, on an enlarged scale, of the joint-bolt, the end being in section, to show the form of the catch-spring.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists—

First, in the combination, with the side-pieces at one or both sides of the clevis, of flanges, or projections, for supporting the wheel-frame, as hereafter explained.

Second, in the combination, with the front piece of the clevis, of an eye, or ring, for receiving a side-draught rod, as hereafter set forth.

Third, in the combination, with the beam and front piece of the clevis, of a side-draught rod, as hereafter described.

Fourth, in the combination, with the joint-bolt, of a catch-spring, as hereafter explained.

In the drawings—

The part indicated by letter A represents the beam of a plow or other implement, which may be made of either wood or metal, in the usual manner.

To the forward end of said beam, at its sides, are fastened two side-pieces, B B, with their forward ends extending beyond the end of the beam, and pierced with a vertical row of holes, *a*, to allow of the draught being varied to different heights.

One of the side-pieces B, in this instance, is furnished with two projecting flanges, *b b*, between which the wheel-frame is to be supported in an upright position, it being retained in such position by a bolt, inserted in the hole *c*, located centrally between the flanges *b b*.

If preferred, the flanges *b b* may be formed on both of the side-pieces B, in which case the wheel-frame may be shifted, so that the wheel can be used at the side or under the beam.

Forward of the side-pieces B is arranged the front piece D of the clevis, consisting of a curved bar, of malleable iron or other metal, perforated throughout its length with a row of holes, *e*, in which to secure the drag-loop E.

By changing the loop E to different holes *e*, the line of the draught may be varied.

At the rear of the front piece D are projecting ears, F F, by means of which the front piece is hinged to the side-pieces B by a bolt, G, which passes through the holes *a* in the side-pieces, and through the projecting ears F, as fully indicated in the drawings.

Near the end of the front piece D is a ring, or eye, H, into which is hooked one end of the draught-rod K, the other end being hooked into an eye-bolt, M, secured in the side of the beam A, as indicated in the drawings.

The joint-bolt G is provided with a slot, *f*, at its end, in which is arranged a spring, *m*, having an upward curve, as indicated in fig. 3.

The spring is easily depressed, to allow of the insertion and withdrawal of the bolt, but is sufficiently strong to retain the bolt in position during the jar incident to ordinary use, by pressing against the exterior of the side-piece B.

The spring-bolt G may be used in other parts of agricultural implements beside the clevis-joint, and I do so propose to use it.

It will be seen that by the use of my improved clevis the line of draught may be moved to a greater distance from the end of the beam laterally, than could be done with safety with a clevis made in the usual manner, the front-draught piece of which is supported entirely by the side-pieces of the clevis.

It is sometimes desirable to use three or more horses abreast in plowing, in which case it is necessary to carry the draught so far to one side that a plow, with the ordinary clevis-attachment cannot be used, unless the plow is built for that express purpose, by swinging the beam to one side, and in that case the plow is not adapted for use with a single pair of horses.

But with my improved clevis any plow may be readily adapted for use with two or more horses abreast, thereby obviating the necessity of having more than one plow for different teams.

By the use of the spring-bolt G, made as described, it is not liable to work out and become injured by being bent or broken while used in a partially-detached position.

The spring *m* may be secured in the bolt G by riveting, or heading down, or in any other suitable manner.

My improved clevis is very important in plows used for reclaiming wet meadows, in which case the team must necessarily walk upon the unplowed land.

Having described my improvement in clevises for plows and other agricultural implements,

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

1. The combination of flanges *b b* with one or both of the side-pieces B of the clevis, substantially as and for the purposes set forth.

2. The combination, with the front piece D, of an eye, or ring, H, as and for the purposes stated.

3. The combination, with the plow-beam A and front piece D, of a side-draught rod, K, substantially as and for the purposes set forth.

4. The combination, with the joint-bolt G, of a catch-spring, *m*, substantially as shown and described.

E. G. MATTHEWS.

Witnesses:

THOS. H. DODGE
D. L. MILLER.