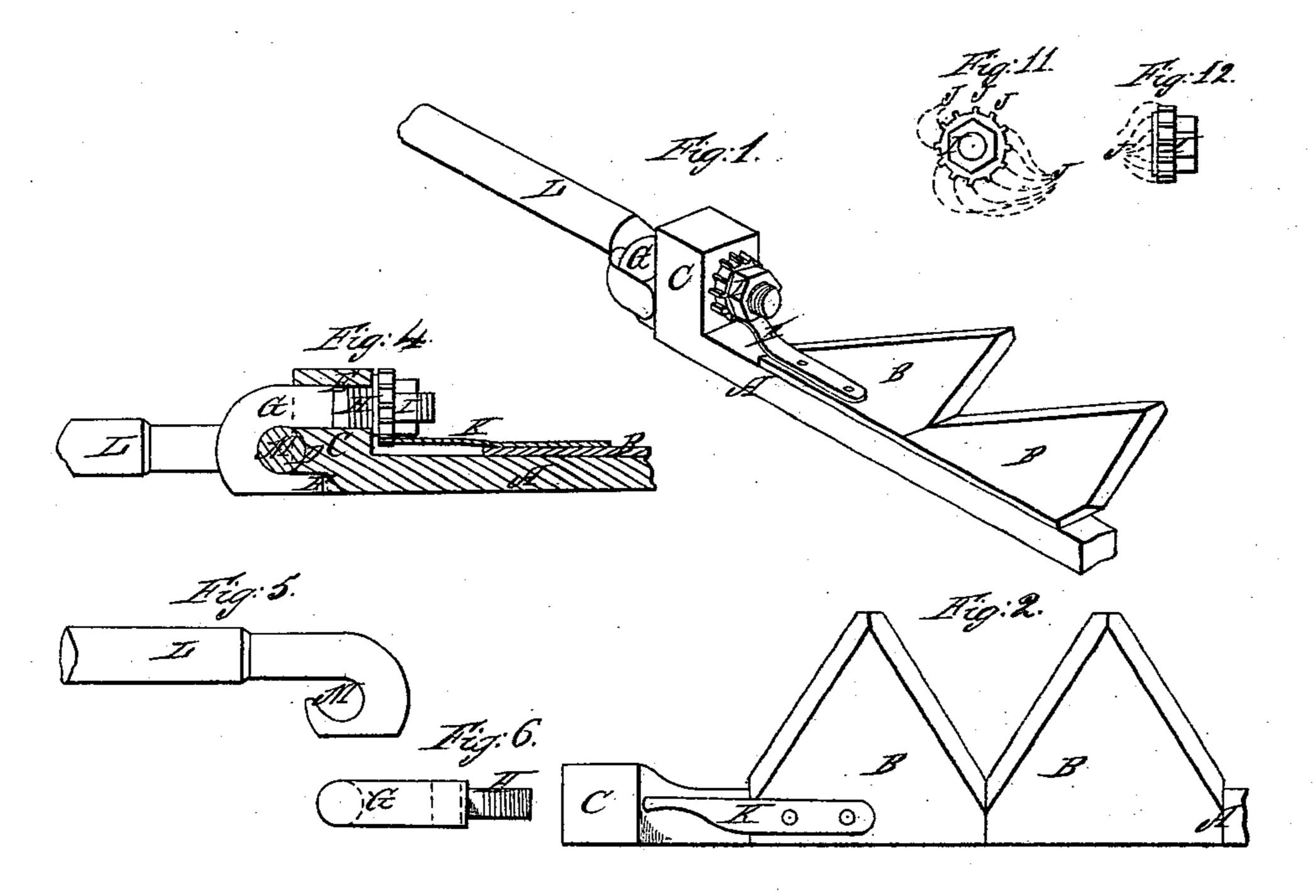
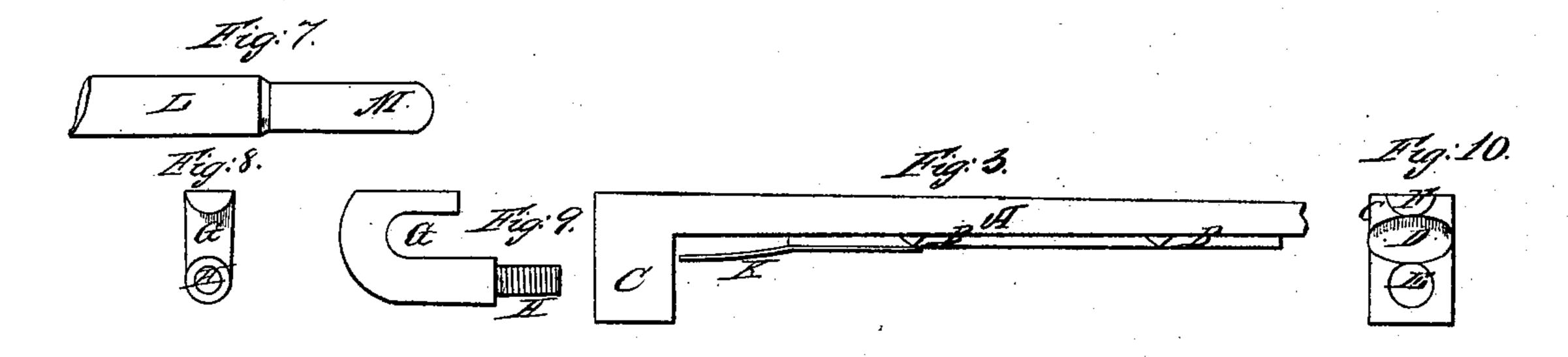
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Patentel Feb. 22,1870.





Witnesses: De Brown J.F. Beale S. S. Lamb By his atto Belling

## UNITED STATES PATENT OFFICE.

SALEM T. LAMB, OF NEW ALBANY, INDIANA.

## IMPROVED PITMAN-JOINT FOR HARVESTERS.

Specification forming part of Letters Patent No. 100,159, dated February 22, 1870.

To all whom it may concern:

Be it known that I, SALEM T. LAMB, of New Albany, in the county of Floyd and State of Indiana, have invented a new and useful Improvement in Pitman-Joints for Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a plan of the same. Fig. 3 is a side elevation. Fig. 4 is a vertical longitudinal section of the same; Fig. 5, side view of pitman-hook; Fig. 6, edge view of cutterbar hook; Fig. 7, back view of pitman-hook; Fig. 8, end view of cutter-bar hook; Fig. 9, side view of same; Fig. 10, end view of heel of cutter-bar; Figs. 11 and 12, plan and elevation of tightening-nut.

This invention relates to that class of pitman-joints which are constructed to yield in lateral directions; and it consists in the construction of a joint by means of a hook and eye, constructed to permit an adjustment to compensate for wear, and to take up lost motion, so that, without varying said adjustment, the pitman may be detached from the cutterbar.

That others may understand the construction and operation of my invention, I will particularly describe it.

A is the cutter-bar, having the ordinary cutter-sections B B secured to it in the usual manner.

The heel C is forged on the cutter-bar, and projects upward a distance sufficient to meet the under side of the usual guide-plate, which is secured to the inner shoe, to prevent the heel of the cutter-bar from being lifted from its seat during its reciprocations.

In the outer end face of the heel C a concave recess, D, is formed, (see Figs. 4 and 10,) and immediately above this recess a hole, E, is bored entirely through the heel, in the direction of the cutter-bar, and immediately below said recess another recess or notch, F, is formed, extending along the under side of the cutter-bar a short distance.

The artist has represented the parts as upside down in Figs. 3, 8, 9, and 10.

The hook G is formed from a cylindrical rod, bent upon itself, as shown in Fig. 9, and a portion of the shank H is turned to a smaller

cylinder, and has a screw-thread cut upon its outer surface.

The hole E is in diameter exactly equal to the diameter of the rod from which the hook G is formed, and the shank of said hook is passed through said hole, while the point rests in the recess F. Thus, when the hook G is in position, the curve of the inner portion of the hook is continued in the curve of the recess D, and the lines of the two curves united form a circle, as shown in Fig. 4.

The nut I is fitted to the screw-thread H, and as it operates against the inner surface of the heel C, it may cause the shank of the hook to be drawn more or less through the hole E, and thus contract or expand the eye formed by the bend of the hook, more or less, as desired.

The point of the hook being confined in the recess F prevents any turning of the shank in its seat, and in order to prevent the nut I from being loosened by the jar of the machine during operation, the periphery of the nut is cut with teeth J, leaving spaces, into one of which a detent may rest, when the nut has been brought to proper position, to prevent that position being changed; and for an efficient detent I prefer to employ a simple spring, K, though a latch of any other description answers every requirement.

When it is desired to remove the nut or change the capacity of the eye, it is only necessary that the spring should be depressed to disengage it, and permit the nut to be rotated.

The recess F may be simply indented in the face of the cutter-bar, as shown, in which case the point of the hook would require to be cut down to make it flush with the surface of the cutter-bar, as shown in the drawings; or the point of the hook may be made cylindrical, and may be inserted in a corresponding hole, if there be room to make one.

The pitman L is made with a hook, M, to be inserted through the eye formed by the hook G.

The hook M is made cylindrical until the center of the bend has been passed, and it is then flattened on the outer side, as shown in Figs. 1 and 5, and made quite thin at the extreme point, which is curved around in an arc continuous with the curve of the hook, and so as to leave a small space between said point and the shank, as shown in Fig. 5.

The space at the point of the hook is less

than the diameter of the rod of the hook G, so that it is impossible for the hooks to be detached when in ordinary working position; but when brought into a position so that the flattened portion near the point of hook G can pass through the space opposite to the point of the hook M, then the pitman and cutter-bar may be separated.

When the hook M is in position it should exactly fill the eye of the hook G, the bend of the hook M resting in the recess D, and the eye may be adjusted by means of the screw I, so that there may be freedom of motion in all directions, and no play or lost motion. While kept in that condition the machine will operate with efficiency and without noise or jar.

Having described my invention, what I claim

as new is—

1. The combination of the hooks M and G, constructed substantially as described, in connection with the heel C of a harvester cutterbar.

2. In combination with the hook G, to make an eye for a pitman-joint, the nut I, constructed with the teeth J and the detent K, substan-

tially as described.

3. In combination with a hook, M, at the end of the pitman, a hook, G, constructed and arranged as described, so that all adjustment for lost motion shall be toward the heel of the cutter-bar, as set forth.

SALEM T. LAMB.

Witnesses:

WM. T. STILWELL, THOMAS COLLIER.