E. G. Fish,

Pitman.

No. 113039. Patented Mar. 28. 1871.

Fig. 1

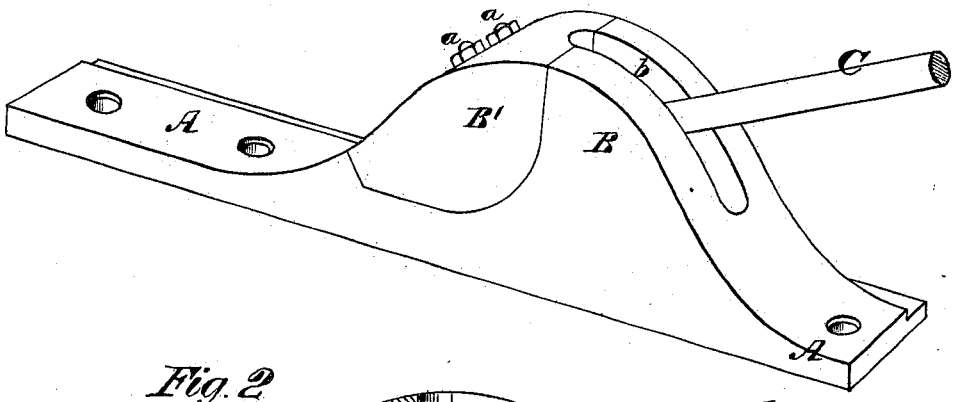


Fig. 2

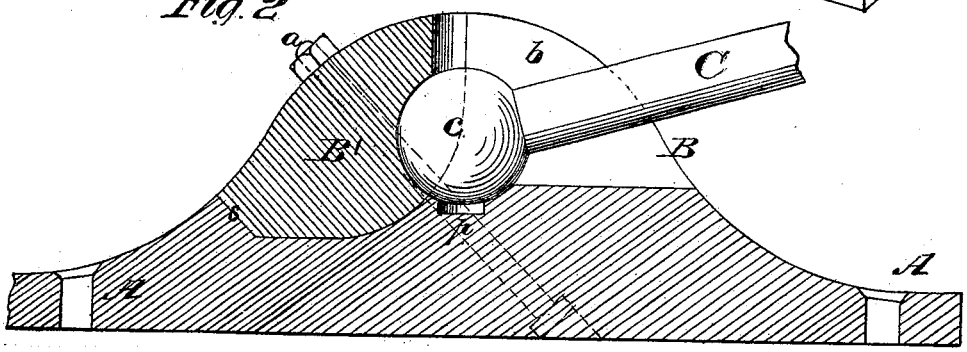
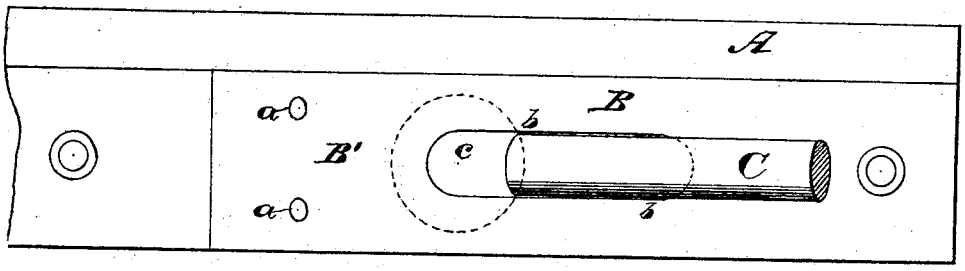


Fig. 3



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EDWARD G. FISH, OF COLFAX, IOWA.

IMPROVEMENT IN PITMAN-ROD CONNECTIONS.

Specification forming part of Letters Patent No. **113,039**, dated March 28, 1871.

To all whom it may concern:

Be it known that I, EDWARD G. FISH, of Colfax, in the county of Jasper and State of Iowa, have invented a new and Improved Pitman-Rod Connection for Harvesters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a perspective view of the improved pitman-connection. Fig. 2 is a vertical section taken centrally through the same. Fig. 3 is a top view.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved mode of connecting the pitman-rod of a reaping or mowing machine, whereby looseness of the joint is obviated, and the parts which form the joint and surround it are made very durable and substantial.

My object is to combine with a ball-and-socket joint a two-part bearing, one of which parts is formed on the plate which is bolted to the knife-bar; also, to combine an oil-receptacle with the ball-and-socket joint, as will be hereinafter explained.

The following description will enable others skilled in the art to understand my invention.

In the accompanying drawing, A represents the oblong base portion of the bearing, which is perforated to receive rivets, by which it is secured fast to a knife-rod. On this base-piece a slotted socketed elevation, B, is formed, which, with the socketed portion B′, forms the bearing to receive the end of a pitman-rod, C.

The elevation B is constructed with a vertical slot, *b*, which is longitudinally through it, and which allows the pitman-rod free play during the reciprocating motions of the sickle. Into this elevation B a socket is formed, which is adapted for receiving part of a ball or rounded enlargement, *c*, which is formed on the part C of the pitman-rod. At the base of this socket a depression, *p*, is made into the elevation B, as shown in Fig. 2, which is intended for containing the oil for lubricating the ball or enlargement, and the surfaces against which it impinges. The elevation B is scored out, and adapted to receive a removable section, B′, which has a socket formed into it, that forms part of the socket which is in the elevation B, to receive the enlargement *c*, and inclose, or partly inclose, the same.

The section B′ is not cast with the section B and its base A—that is to say, the section B′ is a separate piece, which is secured in its place against the elevation B and its inclined shoulder S by means of bolts *a a*, which are passed obliquely from below upward through the base A, the elevation B, and the section B′, and which have nuts applied on their upper ends. The bolts *a a* are arranged on opposite sides of the longitudinal vertical center of the bearing, so as to clear the socket which receives the ball *c*.

The ball or enlargement *c* may be formed on the end of the pitman-rod C, or it may be formed on a separate piece, and afterward secured to the pitman-rod, thereby allowing the said ball to be renewed in case it becomes too much worn for use.

By chilling those surfaces of the articulation which are exposed to rapid wear their durability will be greatly improved.

It will be seen from the above description that the socketed bearing for receiving the ball or enlargement *c* is formed partly in an elevation of the base-piece A, and partly in a removable section, B′, which latter is confined in its place by means of two bolts and a shoulder-abutment, S. In this way a very solid and substantial bearing is produced of two pieces, one of which forms part of the base-piece A, while the other can be removed at pleasure for detaching the pitman-rod. The cup *p*, which is formed at the bottom of the socket in the elevation B, will receive oil and supply it to the joint, keeping the same well lubricated.

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

1. The parts B, B′, and A, socketed and slotted, as described, to receive the enlargement *c* on the pitman-rod C, and secured together, in combination with screw-bolts, substantially as described.

2. The oil-cup *p*, formed into the base of the socket of the fixed elevation B, substantially as described.

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Witnesses:

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