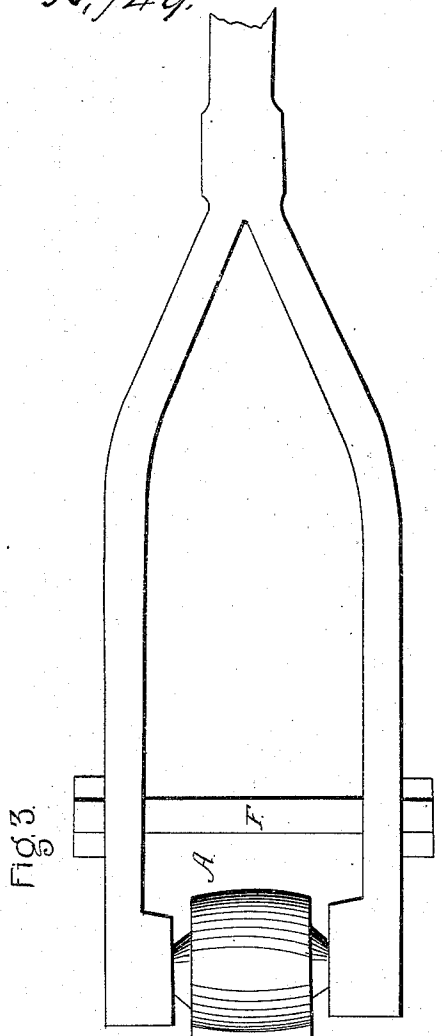
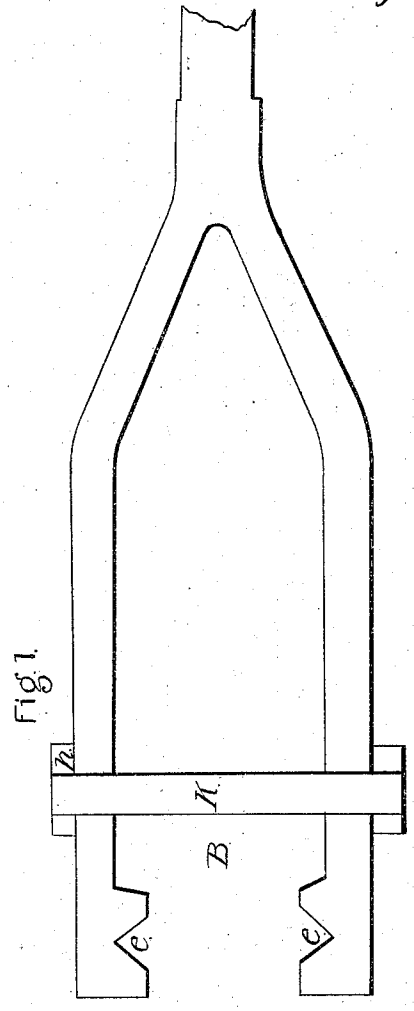
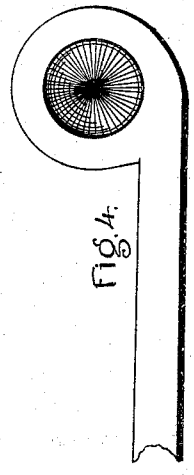
M. H. Hilburn.

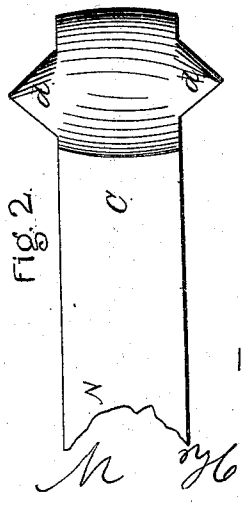
Harvester Pitman.

No. 56,749. Patented Jul. 31, 1866.









Witnesses:

John Tomanny

A. N. Klinefelter

Inventor:

M. H. Hilburn

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MILTON H. HILBURN, OF WILMINGTON, ILLINOIS.

IMPROVEMENT IN SICKLE-HEADS FOR HARVESTERS.

Specification forming part of Letters Patent No. **56,749**, dated July 31, 1866.

To all whom it may concern:

Be it known that I, MILTON H. HILBURN, of Wilmington, in the county of Will and State of Illinois, have invented a new and useful Improvement in Sickle-Heads to be used on Mowers and Reapers; and I do hereby declare that the following is an exact and full description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In the methods hitherto employed to convert the circular motion into reciprocating motion in mowers and reapers at the point where the pitman unites with the sickle-bar it has been found very difficult to overcome the liability to break the connecting parts. This liability arises from the necessity that exists of giving these parts very rapid motion, and of using as little metal as possible in making these parts, in order that they may be made as light as possible.

To overcome the difficulty above alluded to is the object and nature of this invention.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a view of that part of my sickle-head which is divided into two arms at one end, and at the other end it terminates in one part, and is the end which is united, when in use, with the crank, which has a circular motion. Fig. 2 is that part of my sickle-head which is embraced at the two conical journals *d d* by the two arms of Fig. 1, at and in the two conoidal sockets *e e*. The other end of Fig. 2, at N, is, when in use, united with the sickle-bar and has reciprocating motion. Fig. 4 is a side or elevated view of Fig. 2, illustrating, from another view, its construction, not easily shown at Fig. 2.

K, Fig. 1, is a bolt passing through the two arms of Fig. 1. At one end, *h*, of this bolt is a nut, which is screwed onto this bolt, and by turning this nut the arms are brought nearer together, as it may be desired.

Fig. 3 shows the two parts Figs. 1 and 2 united and ready to be placed in position on the mower or reaper for use.

The two conical journals *d d* are placed in the conoidal sockets *e e*. The nut *g* is then turned, closing the parts so nearly as to leave just sufficient room to enable the two parts to play with ease, while at the same time all jarring or noise is done away with, so common in the old method employed.

I do not make any claim to the form or device used by G. B. and C. B. Garlinghouse, to whom a patent was granted October 28, 1862, for a sickle-head. I distinctly disclaim this form.

By attaching the conical journal *d d* to the lug *c* the line of communication between the crank and the sickle-bar is made more direct. Consequently there is less liability to bend the arms of the part Fig. 2, the leverage between the two parts forming the sickle-head being in favor of the two arms.

In this method of constructing a sickle-head I am enabled to use a less quantity of metal than by the old plan, and at the same time secure much greater strength and durability, as I so use and construct the metal and the parts into which it is made that the greatest strength of which the metal is capable of having is completely secured.

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

A sickle-head to be used in mowers and reapers, constructed, substantially as described, with the conical journals *d d* upon the lug *c*, in the manner and for the purpose specified.

M. H. HILBURN.

Witnesses:

A. N. KLINEFELTER,

JOHN LOMASNY.