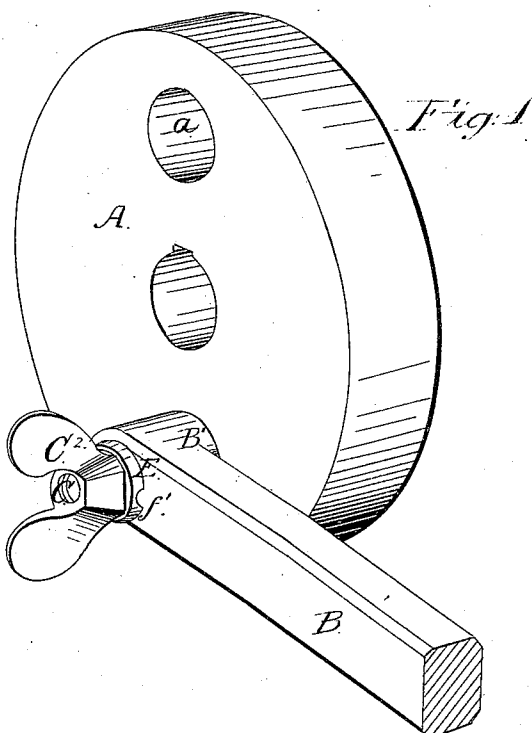


*J. O. Taber.*

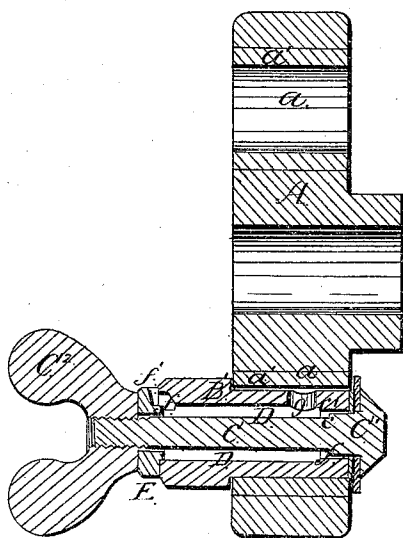
*Harvester Pitman.*

*N<sup>o</sup> 104,080.*

*Patented Jun. 7, 1870.*



*Fig 1*



Witnesses:

*A. Mahon*  
*A. B. Smith*

Inventor:

*J. O. Taber*  
by *His Attorney*  
*A. B. Smith*

# UNITED STATES PATENT OFFICE.

J. OSCAR TABER, OF SALEM, OHIO.

## IMPROVED CRANK-WRIST FOR HARVESTING-MACHINES.

Specification forming part of Letters Patent No. 104,080, dated June 7, 1870.

*To all whom it may concern:*

Be it known that I, J. OSCAR TABER, of Salem, county of Columbiana, and State of Ohio, have invented a new and useful Improvement in Crank-Wrist or Pitman Connection for Harvesting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of the crank-wheel and end of pitman connected therewith, and Fig. 2 is a sectional view of the same, taken in the line of the crank-wrist.

Similar letters of reference denote corresponding parts in both figures.

It is a fact well understood and appreciated by those familiar with the practical operation of harvesting-machines that, in order to secure the easy and successful operation of the same, and at the same time that they may be made as light as is practicable consistent with the requisite strength of parts, it is necessary that the gearing and the connections of the reciprocating cutters therewith should be relieved of all unnecessary friction, so that, as far as possible, the entire force of the traction of the driving-wheel upon the ground may be expended in imparting the necessarily rapid vibratory motion to the cutters.

In machinery generally, where some of the parts are stationary, it is usually an easy matter to supply the working parts with an oiling device connected therewith through some fixed part, and the friction and consequent rapid wear of the parts are thereby obviated to a great extent; but where, as in this class of machines, all the parts are in motion, and are subjected to the constant jolting consequent upon the machine being drawn over rough, stony, or uneven ground, the difficulty of oiling the parts properly is much greater, and for the want of some efficient device of the kind at the crank-wrist of harvesting-machines such machines are more rapidly worn out and destroyed than would otherwise be the case.

The object of my invention is to supply this want and to overcome the difficulties, the rapid wear, and unnecessary strain upon the parts referred to, and also upon the team; and to this end my invention consists in a novel construction of the crank-wrist and connections, whereby said wrist is supplied with a reservoir, which may be filled with oil, and

from which it is fed automatically to the joint or wrist connection of the pitman and crank-wheel, in such manner as to obviate the necessity for the stopping of the machine at frequent intervals for the purpose of oiling said joint, as will be explained.

In the accompanying drawing, A represents the crank-wheel, which may be of the usual construction, except that by preference I make it with two or more perforations, *a*, arranged at different distances from the driving-shaft or center, through either of which the pitman may be connected with said wheel for the purpose of varying the throw of the crank-wrist. Said perforations are provided with annular facings *a'*, of Babbitt or other metal usually employed for such purposes, and the wheel is keyed or feathered to its driving-shaft in any usual manner.

B is the pitman or connecting-rod, made, in this instance, in one piece with the wrist B', which enters and fits snugly in the perforation *a* in the crank-wheel A. The wrist B' is perforated to receive the wrist-pin or through-bolt C, provided with a head, C', at one end, and at its other end with a thumb-nut, C<sup>2</sup>.

The end of the bolt C adjacent to the head C', and also of the perforation in the crank-wrist corresponding therewith, is squared, to prevent the bolt from turning in the wrist, to a point indicated at *c c'*, and from said point to the nut end of the bolt and wrist the bolt and wrist are rounded, the former of a diameter of a circle inscribed within the square at the end *c*, and the latter of a diameter of a circumscribed circle of the same square, or thereabout, in such manner as to form an annular space between the bolt and wrist, as shown at D, Fig. 2.

The head end of the bolt C is provided with a metal washer, *e*, and with a suitable packing-ring, *e'*, of leather or other suitable material, and between the wrist B' and the thumb-nut C<sup>2</sup> is a washer, E, which, in connection with the washers *e e'*, serves to tightly close the ends of the perforation in the wrist and around the bolt C and of the annular space D, which is thereby made capable of holding a quantity of oil sufficient to oil the crank-wrist for a considerable length of time. The outer face of the wrist has cut in it, on the top of the annular space D, an angular notch, *f*, and the washer E has also an angular notch,

$f'$ , cut in its adjacent face, the two notches, when brought opposite each other, forming a channel or way, communicating with the annular chamber D, and through which the latter may be filled with oil when required. When this is done, the nut  $C^2$  is loosened and the washer E turned until the notches  $f f$  match. The reservoir D is then filled, after which the washer E is turned a quarter around, more or less, to close the reservoir, and the nut tightened to prevent the escape of the oil.

The oil is fed out through a perforation,  $g$ , arranged, by preference, over the annular space, the rapid motion of the crank-wheel serving to throw the oil up through said perforation as fast as is necessary to keep the wrist properly oiled.

The size of the annular space or reservoir D may, of course, be varied as far as is consistent with the size of the crank-wrist, and the requisite strength of parts and the wrist, instead of being made in one piece with the

pitman, may be surrounded by or connected with the same in any usual manner.

Having now described my improvement, what I claim as new, and desire to secure by Letters Patent, as an improvement in harvesting-machines, is—

1. The crank-wrist B' and wrist pin or bolt C, constructed with an annular chamber or reservoir between them for the reception of oil, for the purpose set forth.
2. The notched or perforated washer E, in combination with the crank-wrist, for the purpose set forth.
3. The combination of the crank-wrist B', pin or bolt C, and washers and thumb-nut  $C^2$ , forming the oil-chamber, as described, with the crank-wheel or its equivalent, for the purpose set forth.

J. OSCAR TABER.

Witnesses:

EDWARD KENNETT,  
THOMAS KENNETT.