

(No Model.)

H. NEWMAKER.
CONE PULLEY.

No. 283,646.

Patented Aug. 21, 1883.

Fig. 1.

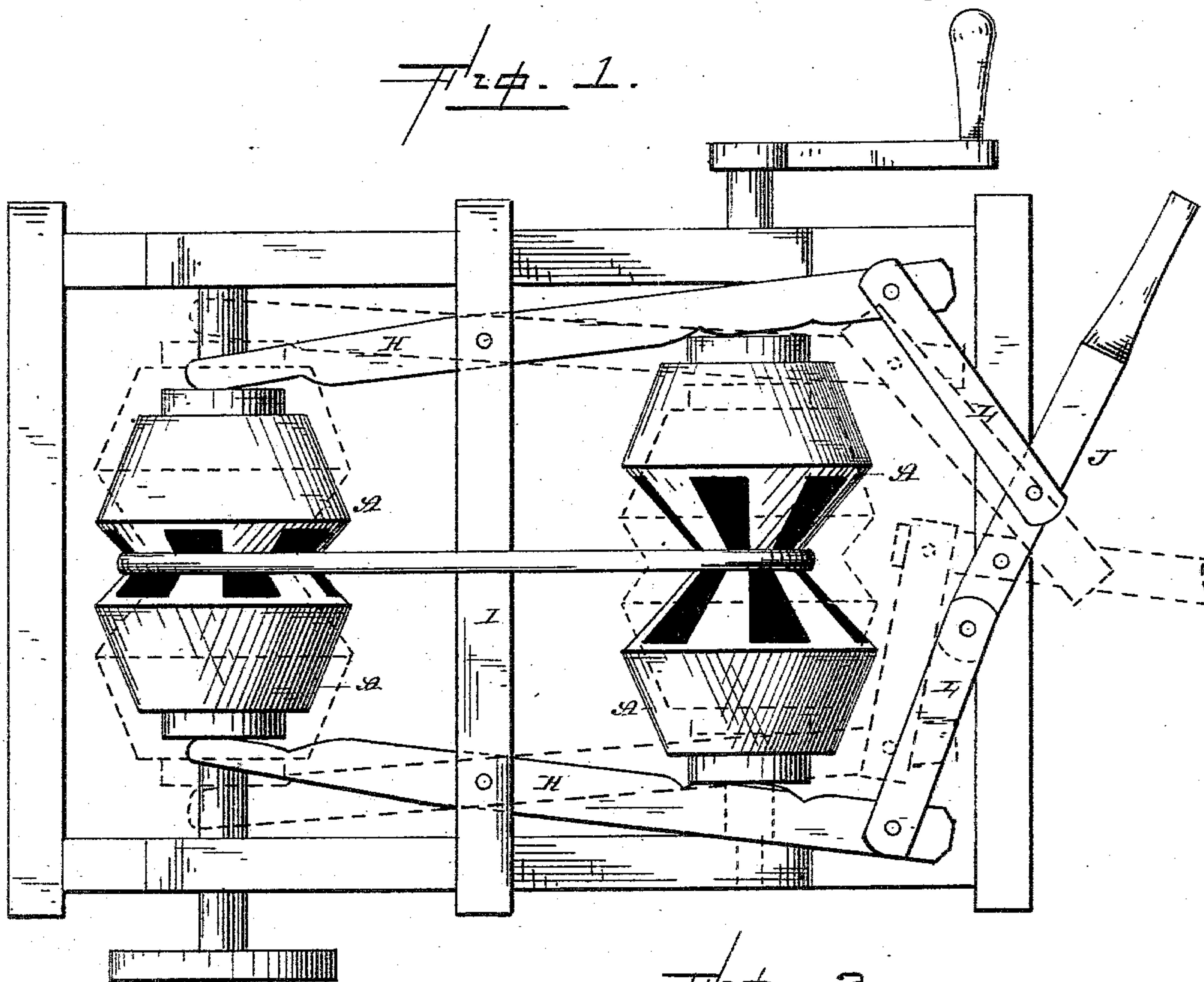
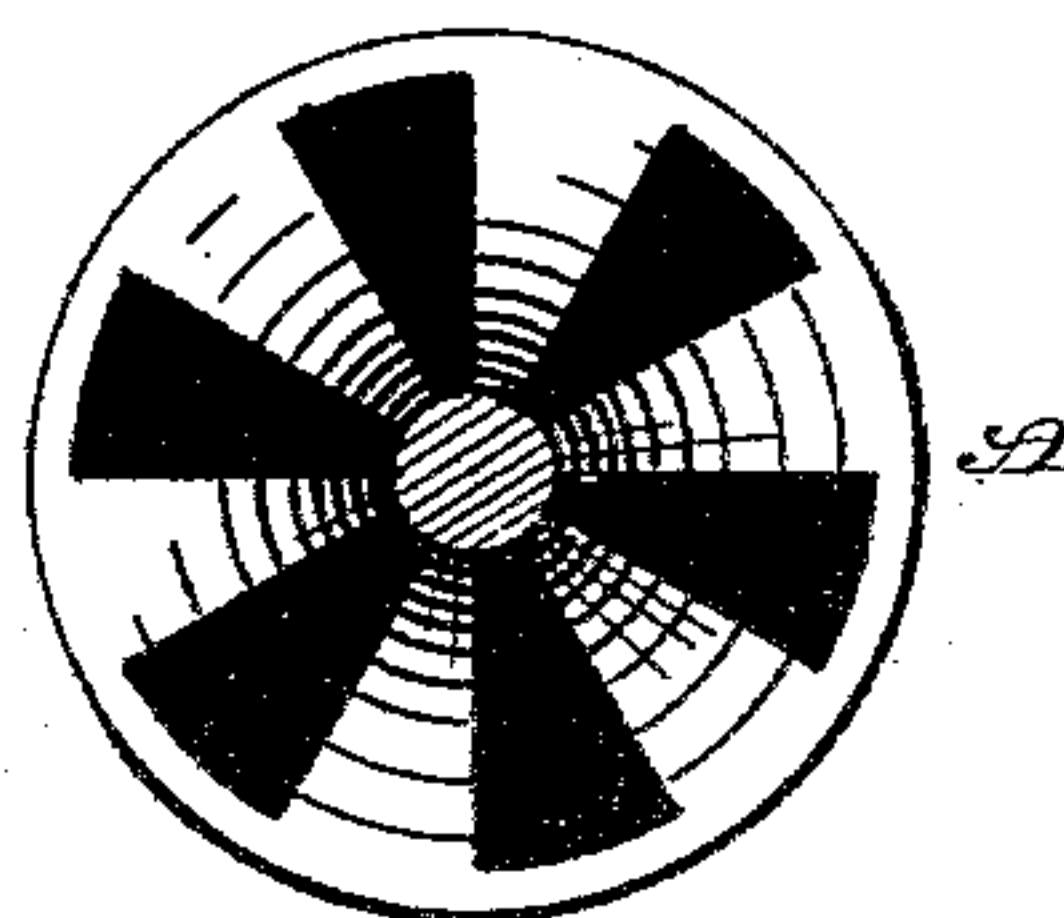


Fig. 2.



— WITNESSES. —

Louis F. Gardner

J. W. Garner

— INVENTOR. —

H. Newmaker
per

F. A. Lehmann,

Atty.

UNITED STATES PATENT OFFICE.

HENRY NEWMAKER, OF STONEBOROUGH, PENNSYLVANIA.

CONE-PULLEY.

SPECIFICATION forming part of Letters Patent No. 283,646, dated August 21, 1883.

Application filed April 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY NEWMAKER, of Stoneborough, in the county of Mercer and State of Pennsylvania, have invented certain
5 new and useful Improvements in Cone-Pulleys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use
10 it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in cone-pulleys; and it consists in the combination of one or more pulleys which are formed
15 of two conical parts, which parts are keyed upon the shafts and made to slide back and forth thereon, with a suitable sliding frame, by means of which the pulleys can be opened and closed without interfering with the movement
20 of the engine, as will be more fully described hereinafter.

The object of my invention is to provide a pulley which can be opened and closed at the will of the operator without interfering with
25 any other part of the machinery, for the purpose of increasing or decreasing the speed of the belt or band which passes around the pulley.

Figure 1 is a plan view of my invention complete. Fig. 2 is a detachable view of one of
30 the parts of the pulleys.

Each pulley is composed of two conical portions, A, which are keyed to the shaft upon which they are placed, so as to revolve with it,
35 and each one has a sliding movement upon its shaft independently of the other. Each part is grooved or recessed at its inner end for a greater or less distance, so that the prongs or fingers which form the other part of the pulley
40 will slide into them. Each part being grooved or recessed in this manner, they can be forced toward each other, when these interlocking points will be inclosed to such an extent that the bearing-surfaces for the cord or band which
45 is passed around the pulley will be considerably increased, and thus cause the band or belt to have a more rapid motion. When it is de-

sired that the cord or band shall move more slowly, the two parts of the pulley are drawn apart, so that their fingers or prongs will not
50 interlock to such an extent, and hence a slower movement will be given to the driving-band.

In order to regulate the movement of the driving-band without interfering with any other part of the machinery, two levers, H, are
55 provided, which are pivoted upon the cross-bar I at any suitable point in between their ends. The inner edges of these two levers rest against the outer ends of the hubs of the pulleys, as shown. These two levers will be con-
60 nected to an operating-lever, J, by means of the connecting-rods L, so that the two levers can be opened and closed at will. When the operating-lever is moved, the levers H are opened at one end and closed at the other, and the
65 two pulleys at the end which is closed will be forced together, while the other two pulleys upon the other shaft will be forced apart by the pull of the driving-band upon them. In proportion as the two pulleys are closed to-
70 gether, so as to make a larger bearing-surface for the band, the band is drawn in that direction, and as the other two pulleys slide freely upon the shaft as the band pulls or bears upon their conical portions, so it will be forced out-
75 ward as far as the opened end of the levers H will permit.

I am aware that sliding pulleys which are capable of enlarging or diminishing the bearing-surface of the driving-belt are not new, and
80 such I disclaim.

Having thus described my invention, I claim—

The combination of the two sets of recessed cone-pulleys A and the shafts upon which
85 they are placed with the supporting-frame, cross-bar I, levers H, connecting-rods L, and lever J, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY NEWMAKER.

Witnesses:

JOHN WEASLLEY NEWMAKER,
DANIEL PERRINE.