

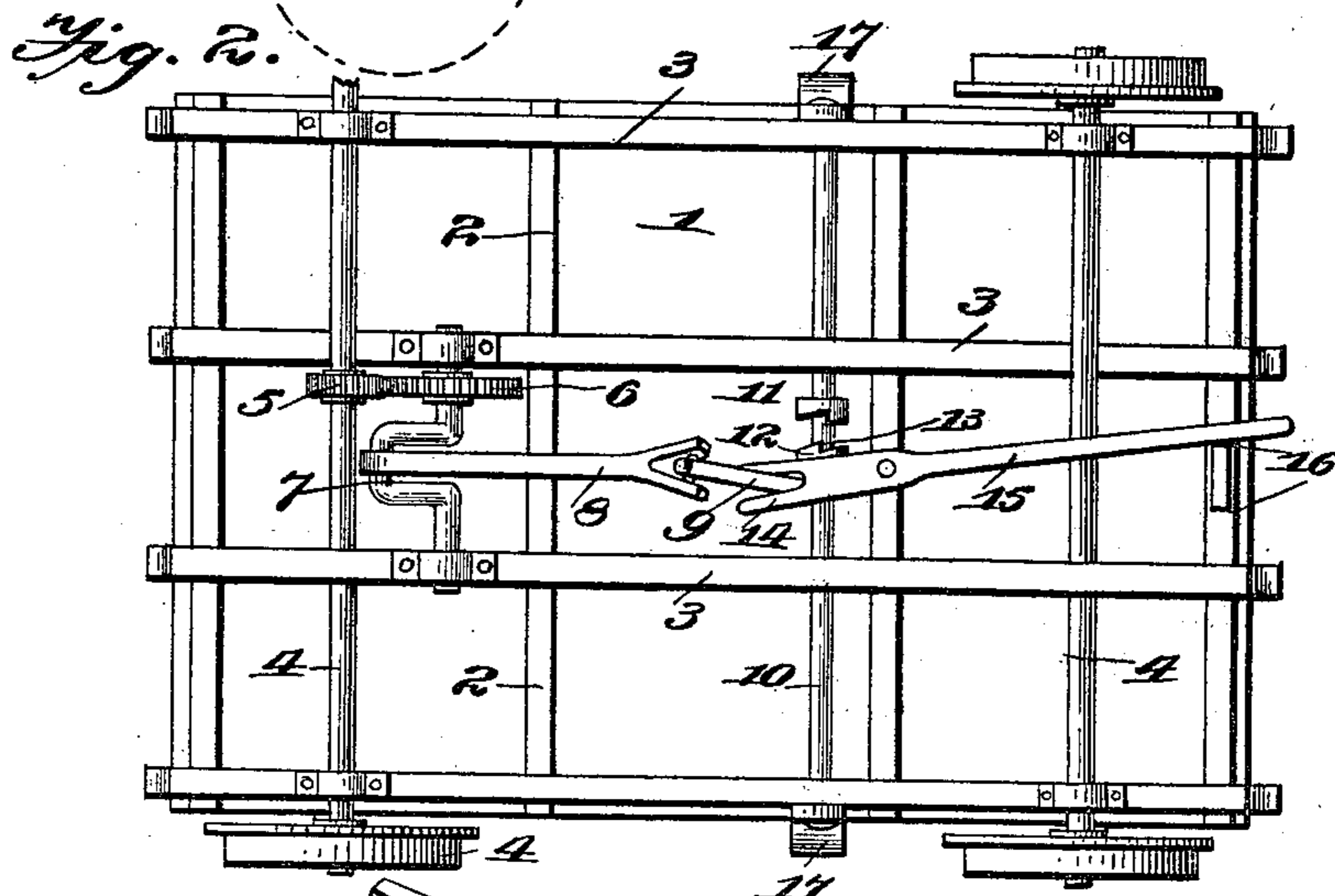
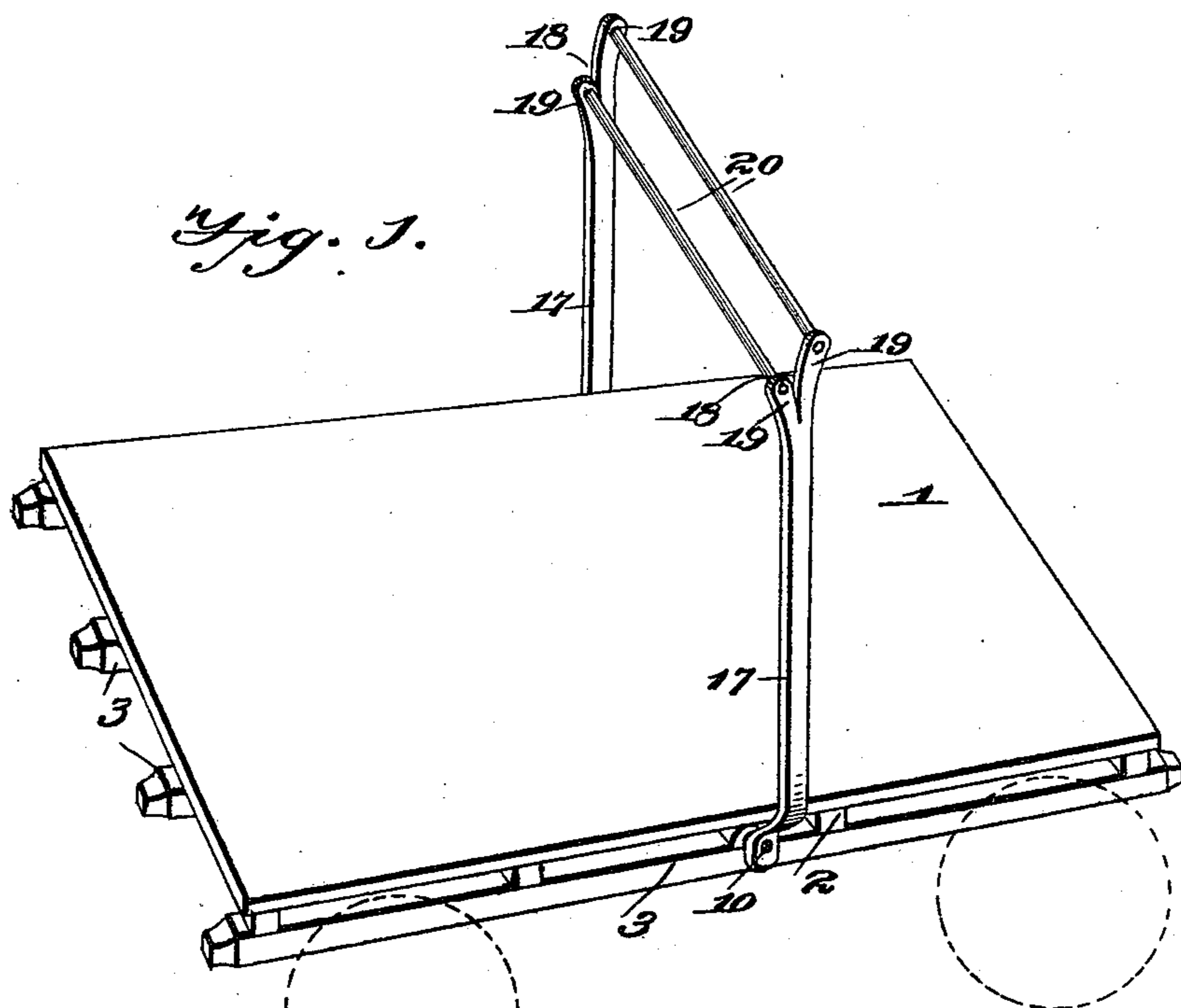
No. 610,297.

Patented Sept. 6, 1898.

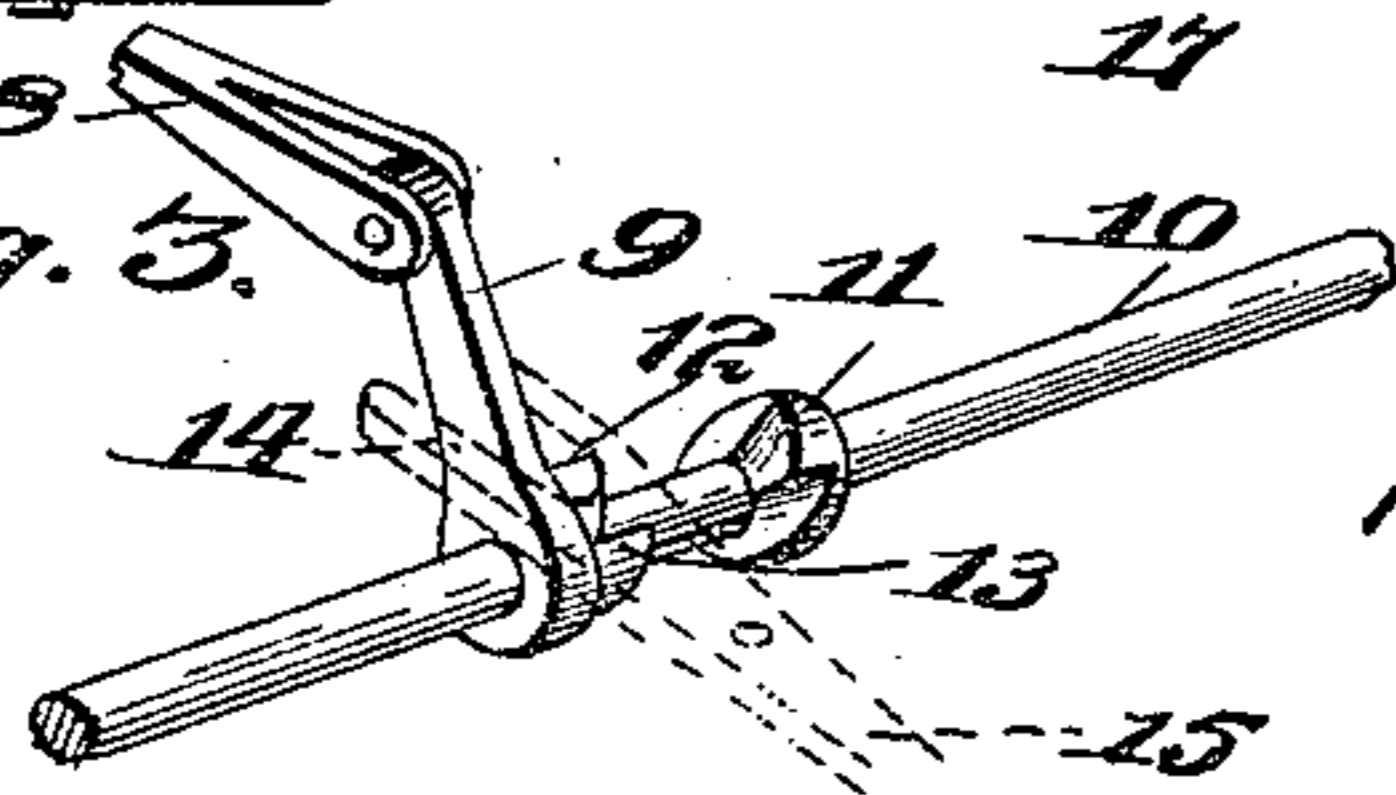
P. ARMSTRONG.
CONVERTIBLE HAND CAR.

(Application filed May 26, 1897.)

(No Model.)



Witnesses
C. E. Hunt,
Victor J. Evans



Inventor
Peter Armstrong.
By *John Wedduburn*

Attorney

UNITED STATES PATENT OFFICE.

PETER ARMSTRONG, OF KANKAKEE, ILLINOIS.

CONVERTIBLE HAND-CAR.

SPECIFICATION forming part of Letters Patent No. 610,297, dated September 6, 1898.

Application filed May 26, 1897. Serial No. 638,253. (No model.)

To all whom it may concern:

Be it known that I, PETER ARMSTRONG, of Kankakee, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Convertible Hand-Cars; 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 appertains to make and use the same.

This invention relates to cars of that class used to convey workmen and materials from one place to another.

The invention consists of the details of construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

The object of the invention is to provide a convertible device of the character set forth wherein the parts are simple and effective in their construction and operation, strong and durable, easily and readily applied to cars now in use, and comparatively inexpensive in the cost of manufacture.

In the accompanying drawings, Figure 1 is a perspective view of a car embodying the invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detail perspective view of the clutch mechanism and operating parts in connection therewith.

Referring to the drawings, wherein similar numerals of reference are employed to indicate corresponding parts in the several views, the numeral 1 designates a platform or bed having cross-braces 2 on the under side thereof, to which are secured stringers 3. The platform or bed will be constructed in any suitable form and is adapted to carry material or operators, and engaging a portion of the said stringers at the front and rear are axles and wheels 4 of the usual form. On one of the axles is keyed a pinion 5, meshing with a gear-wheel 6, supported on a part of a crank 7, having bearings in journal-boxes mounted on a portion of the stringers. Secured to the said crank is one end of a pitman 8, and to the opposite end of said pitman is attached the free end of a clutch-lever 9. Said clutch-lever 9 is movably mounted on a rock or other suitable shaft 10, to which is fixed the recessed clutch-collar 11, and in connec-

tion with the said clutch-lever and also moving on the said shaft is a clutch-head 12, with an angular projection 13, adapted to be moved into the recess of the clutch-collar 11. A forked end 14 of a shifting lever 15 engages the clutch-lever 9, said shifting lever being fulcrumed at a suitable point and having its free end extending outwardly to engage opposite stop-shoulders or seats 16 to retain it in adjusted position. On the opposite ends of the shaft 10 the lower ends of the arms 17 are secured, being bent or primarily formed to pass around the opposite edges of the platform to prevent contact with the latter and having at the upper ends bifurcations 18 to form supplemental arms 19, one of which is longer than the other, and connected to the said arms 19 are hand-bars 20, which will be thereby arranged at varying elevations. This formation of the arms 19 and the consequent positioning of the hand-bars 20 provides a convenient means for engaging the bars and forms means for operating the lever from either side and makes it convenient to easily grasp said bars without forming material projections, which would interfere with the proper operation of the present form of construction.

When it is desired to use the car as a hand-car, the shifting lever 15 is moved to bring the clutch-head of the clutch-lever 9 in engagement with the clutch-collar 11. The arms 17 are then oscillated through the medium of the hand-bars 20 and the pitman 8 operated to actuate the crank 7 and revolve the gear 6, which in turn will rotate the shaft or axle 4, carrying the pinion 5. When the car is at rest or if it is desired to use it as an ordinary push-car, the lever 15 is operated to separate the clutch-head from the clutch-collar, and the arms 17, with the handle-bars 20, are turned over the opposite sides of the car below the upper surface thereof. When the parts are thus arranged, the car can be moved and the clutch-head and clutch-lever will oscillate on the shaft 10 loosely, as will be understood.

The attachments are also arranged so as to be easily applied to cars of this character now in use without in the least changing the construction, with the exception of applica-

tion of journal-boxes for the shaft 10, and suitable materials are employed for constructing the several mechanisms.

It is obviously apparent that many minor
5 changes in the details of construction of the several parts might be made and substituted for those shown and described without in the least departing from the nature or spirit of the invention.

10 Having thus described the invention, what is claimed as new is—

1. In a hand-car, the combination of a rock-
shaft, a clutch-collar rigidly secured to said
shaft, a clutch-head to coöperate with the
15 clutch-collar, a clutch-lever rigidly connected with the clutch-head for operating a pitman, and arms or levers rigidly connected with the opposite ends of the shaft arranged to pass outside the edges of the platform, and a shift-

ing lever for throwing the parts of the clutch 20 out of engagement with each other, substantially as described.

2. In a hand-car, the combination of a rock-
shaft, a clutch-collar rigidly secured thereto,
a clutch-head loosely mounted upon the shaft 25 to engage the collar, a clutch-lever securely fixed to the clutch-head for operating driving-gear through a pitman, arms or handles for rocking the shaft, and means for throwing the parts of the clutch into and out of en- 30 gagement, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PETER ARMSTRONG.

Witnesses:

D. F. SEYSTER,

C. C. MARSH.