

(No Model.)

M. HERRON.

CHAIN WHEEL FOR SAND DREDGERS.

No. 274,601.

Patented Mar. 27, 1883.

Fig. 1.

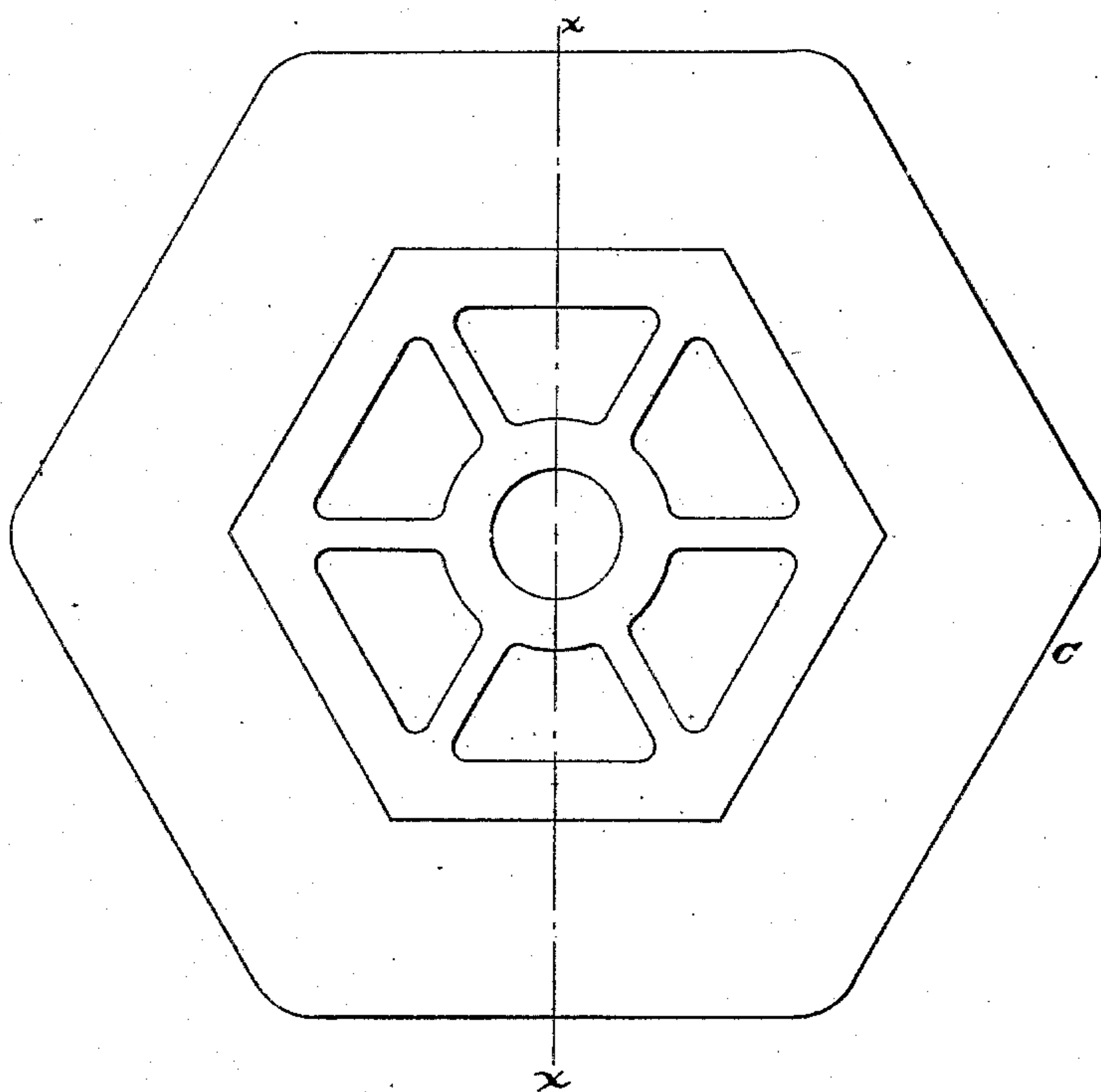


Fig. 2.

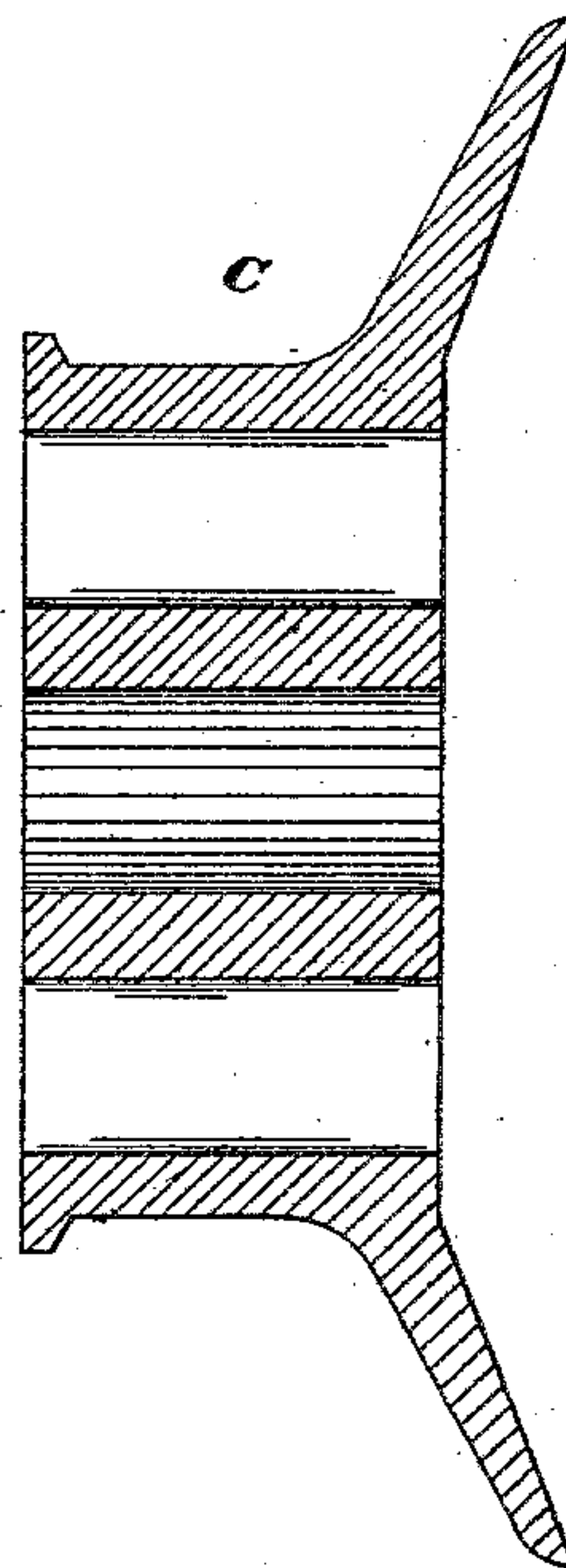
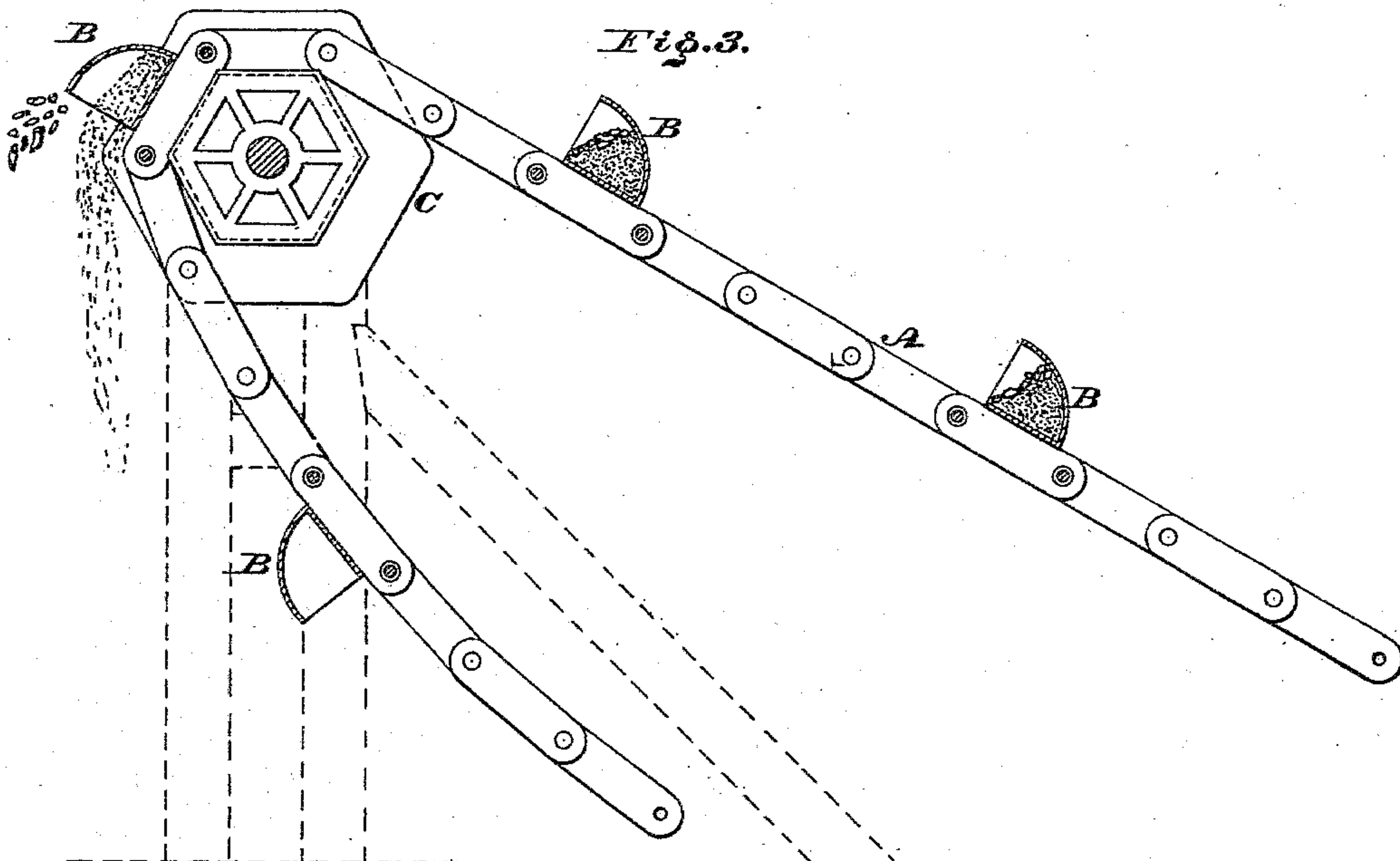


Fig. 3.



WITNESSES:

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MICHAEL HERRON, OF BORDENTOWN, NEW JERSEY, ASSIGNOR OF TWO-THIRDS TO JOHN HERRON AND JAMES HERRON, OF SAME PLACE.

CHAIN-WHEEL FOR SAND-DREDGERS.

SPECIFICATION forming part of Letters Patent No. 274,601, dated March 27, 1883.

Application filed August 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL HERRON, a citizen of the United States, residing at Bordentown, in the county of Burlington, State of New Jersey, have invented a new and useful Improvement in Chain-Wheels for Sand-Dredging Machines, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a face view of the sand-dredging wheel embodying my invention. Fig. 2 is a section thereof in line *x x*, Fig. 1. Fig. 3 is a view showing the operation thereof.

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

My invention relates to conveyers for dredging-machines; and it consists in a conveyer formed of a chain with connected buckets, in combination with a pulley having a long outer flange inclined on its inner face, a short inner flange, and a smooth intermediate portion, these flanges and this intermediate portion being polygonal in cross-section, as hereinafter set forth.

Referring to the drawings, A represents the chain or conveyer of a dredging-machine, and B the buckets thereof of general form and construction.

C represents a wheel having a body of polygonal form, which is supported on a suitable frame or standards rising from the scow or boat, and located at the upper or outer end of said frame or standard, the chain or conveyer passing around said wheel in contact with the angular faces thereof. One end of said body has a short flange for conveniently applying and removing the conveyer or chain, and when the latter is in position said flange is sufficient to prevent accidental displacement of the chain.

The other end of the body has a lengthened flange, which is inclined on its inner face, and located relatively to the direction of the running water of the stream which is undergoing

dredging, whereby while said stream serves to force the chain laterally the flange prevents the chain from leaving the body to any material extent and causes it to ride back to said body.

It will be seen that when power is applied to the wheel motion is imparted to the conveyer, and the dredging operation is occasioned as usual, the wet sand or earth entering the buckets and sifting to the bottom thereof, and the stones and other heavier matters remaining on the top of the mass of sand or earth, as well known. When the links of the chain or conveyer reach the wheel C the corners or points of the latter strike the links and raise the same, thus jarring or shaking the buckets, so that the heavier matters are separated or loosened from the other contents of the buckets, and as the buckets are overturned immediately after they reach the wheel C the heavier matter of the buckets are thrown out somewhat violently in advance of the discharge of the sand or earth, and at a different angle from the latter, while the sand or earth is directed to a place of deposit by itself, so that comparatively clean sand or earth may be obtained, the stones and other heavy matters being gathered or directed elsewhere.

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

An endless chain provided with buckets, in combination with a pulley having a long outer flange inclined on its inner face, a short inner flange and a smooth intermediate portion, these flanges and this intermediate portion being polygonal in cross-section, substantially as and for the purpose set forth.

MICHAEL HERRON.

Witnesses:

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