

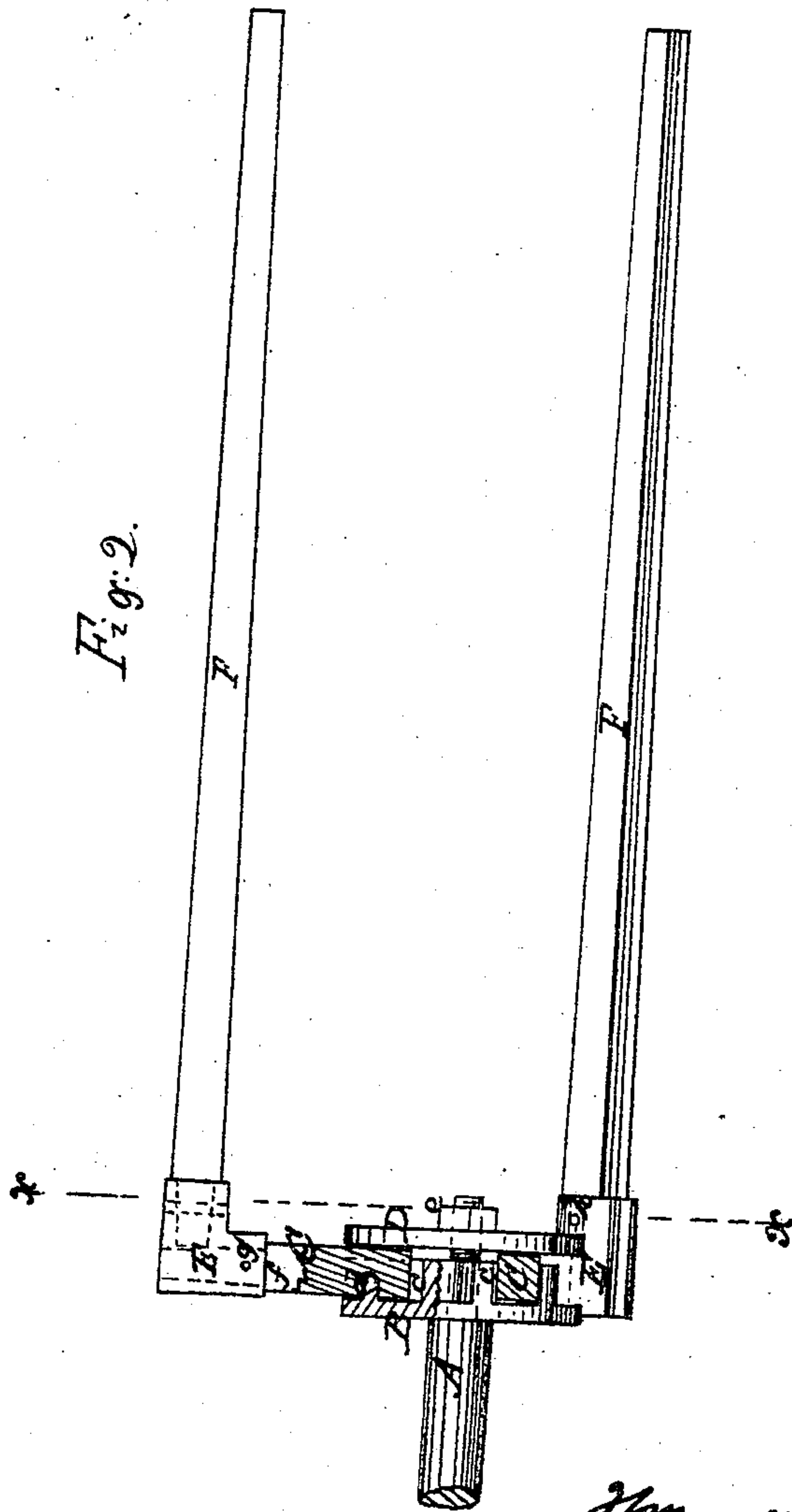
W. F. Rundell.

Mower.

N<sup>o</sup> 72910

Patented Dec. 31, 1867

Fig. 2.



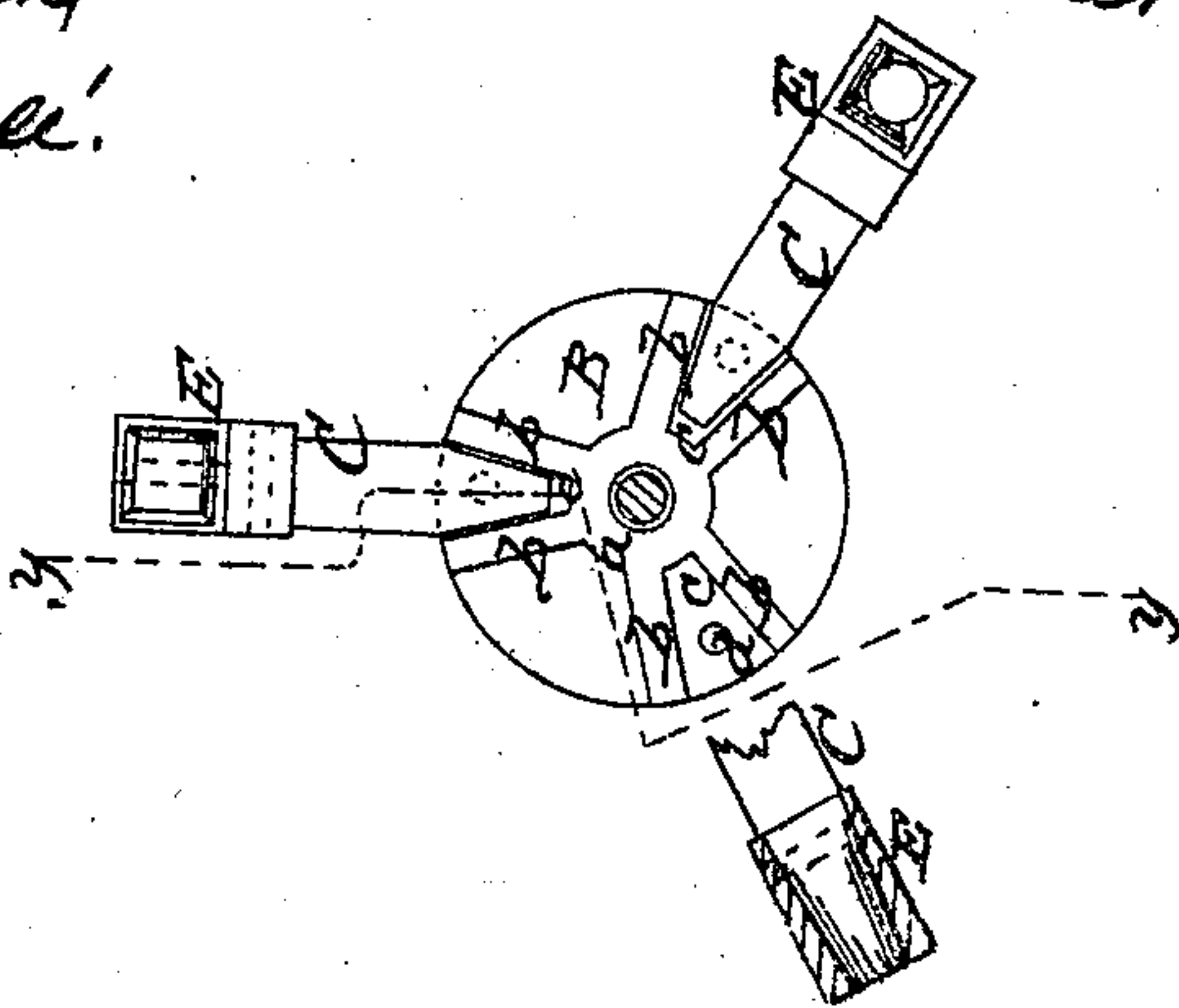
Witness

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Fig. 1.



# United States Patent Office.

WILLIAM F. RUNDELL, OF GENOA, NEW YORK.

*Letters Patent No. 72,910, dated December 31, 1867.*

## IMPROVEMENT IN HARVESTER-REELS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM F. RUNDELL, of Genoa, in the county of Cayuga, and State of New York, have invented a new and improved Reel for Reaping and Mowing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improvement in the construction of that class of reels for reaping and mowing-machines which are not provided with a central shaft; and it consists in a novel way of constructing the reel, whereby the parts are firmly secured together without the aid of oblique braces hitherto used, the reel rendered capable of being readily put together and taken apart, and a smaller reel than hitherto allowed to be used, by which the team may be hitched nearer to the frame of the machine than usual. In the accompanying sheet of drawings—

Figure 1 is a transverse section of my invention, taken in the line *x x*, fig. 2.

Figure 2, a side view of the same, partly in section, as indicated by the line *y y*, fig. 1.

Similar letters of reference indicate like parts.

A represents a shaft, to one end of which my improved reel is attached as follows: On the end of this shaft there is firmly keyed a circular plate, B, having a central hub, *a*, from which radial plates, *b*, project to the edge of the plate, as shown in fig. 1. There are six of these plates, *b*, which form three taper sockets, *c*, to receive the inner ends of arms C, which may be of wood, the inner ends of the arms being made of taper form, to correspond to the shape or form of the sockets, in which they are fitted and retained by spuds or pins, *d*, in the plates and within the sockets, the spuds or pins fitting in holes in the arms. The plates *b* and the end of the hub *a* are all in the same plane, and, with the plate B and spuds or pins *d*, may be cast in one piece. The arms are effectually prevented from moving laterally out of the sockets by means of a plate, D, similar to B, which is secured firmly by a nut, *e*, screwed on the end of shaft A, as will be fully understood by referring to fig. 2. On the outer end of each arm C there is secured a metal elbow, E. These elbows may be of cast metal, and they have taper holes made through them, to receive tenons on the ends of the arms, the inner ends of the metal elbows bearing against shoulders, *f*, on the arms, and pins, *g*, passing transversely through the elbows and tenons. In the other parts of these elbows there are made taper holes, to receive tenons on the inner ends of the beaters F, pins, *h*, passing through these parts of the elbows and the tenons of the beaters. The beaters, like the arms C, are of wood, and may be of any suitable length, and they are parallel with each other and the shaft A, as shown clearly in fig. 2. By this mode of construction, the arms and beaters are firmly secured together, and the arms also firmly secured to the shaft A, and a very strong and durable reel obtained.

The oblique brace-rods hitherto used in this class of reels, extending from the hub to the beaters, are avoided by being rendered unnecessary; and hence I am enabled to use a reel of smaller diameter than usual, as said braces required a reel sufficiently large in diameter to prevent the braces coming in contact with the grain.

By my improvement, I am enabled to use a reel one foot less in diameter; and this is a great advantage, as it admits of the team being hitched nearer to the main frame of the machine, and reduces the draught of the same. The reel also may be readily detached and taken apart, so as to reduce the cost of transportation.

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

The metallic elbows E, constructed as described, in combination with the plates B and D, constructed as described, as and for the purpose specified.

WM. F. RUNDELL.

Witnesses:

WM. F. McNAMARA,

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