

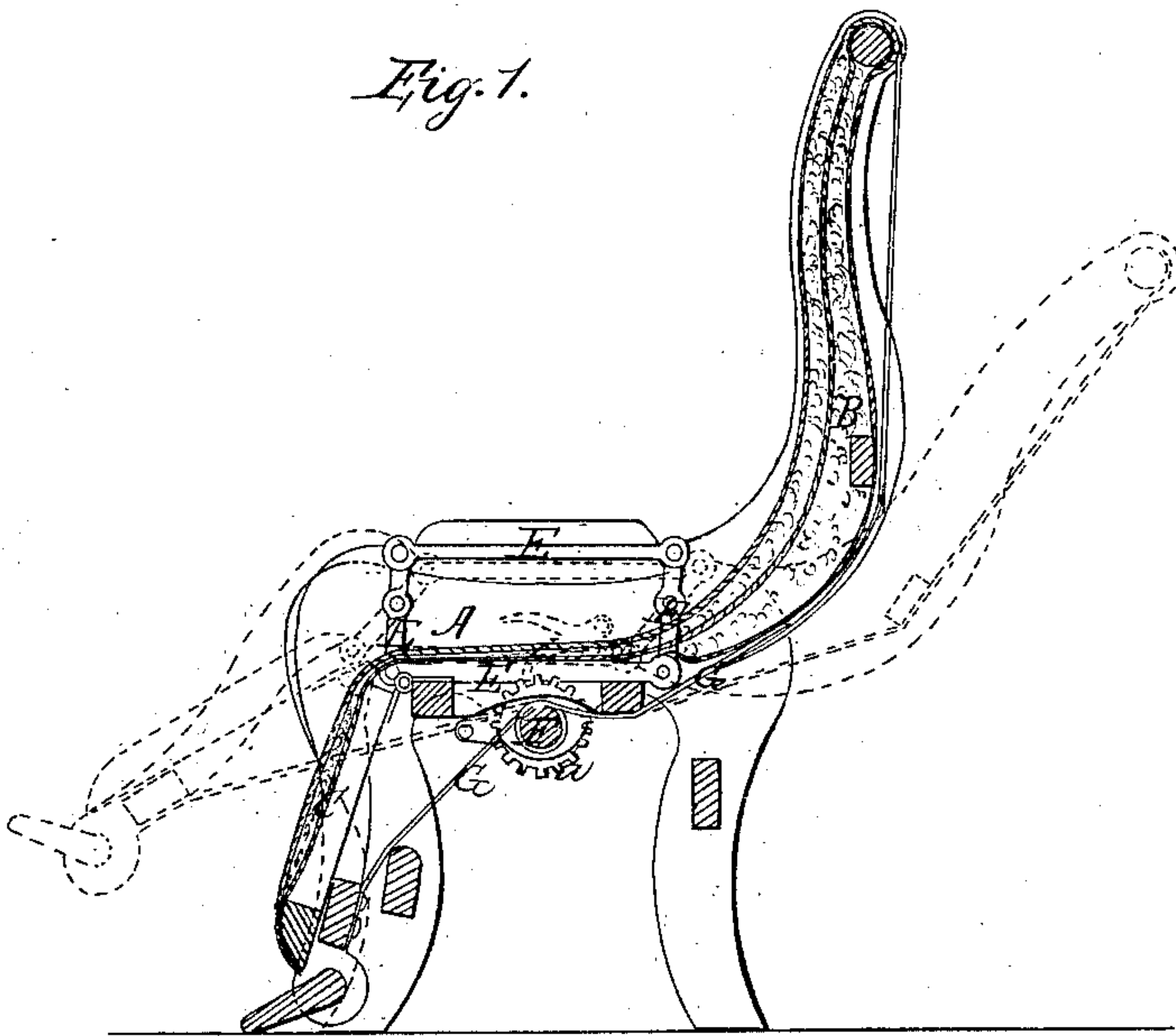
*J. N. McMullen,*

*Invalid Chair*

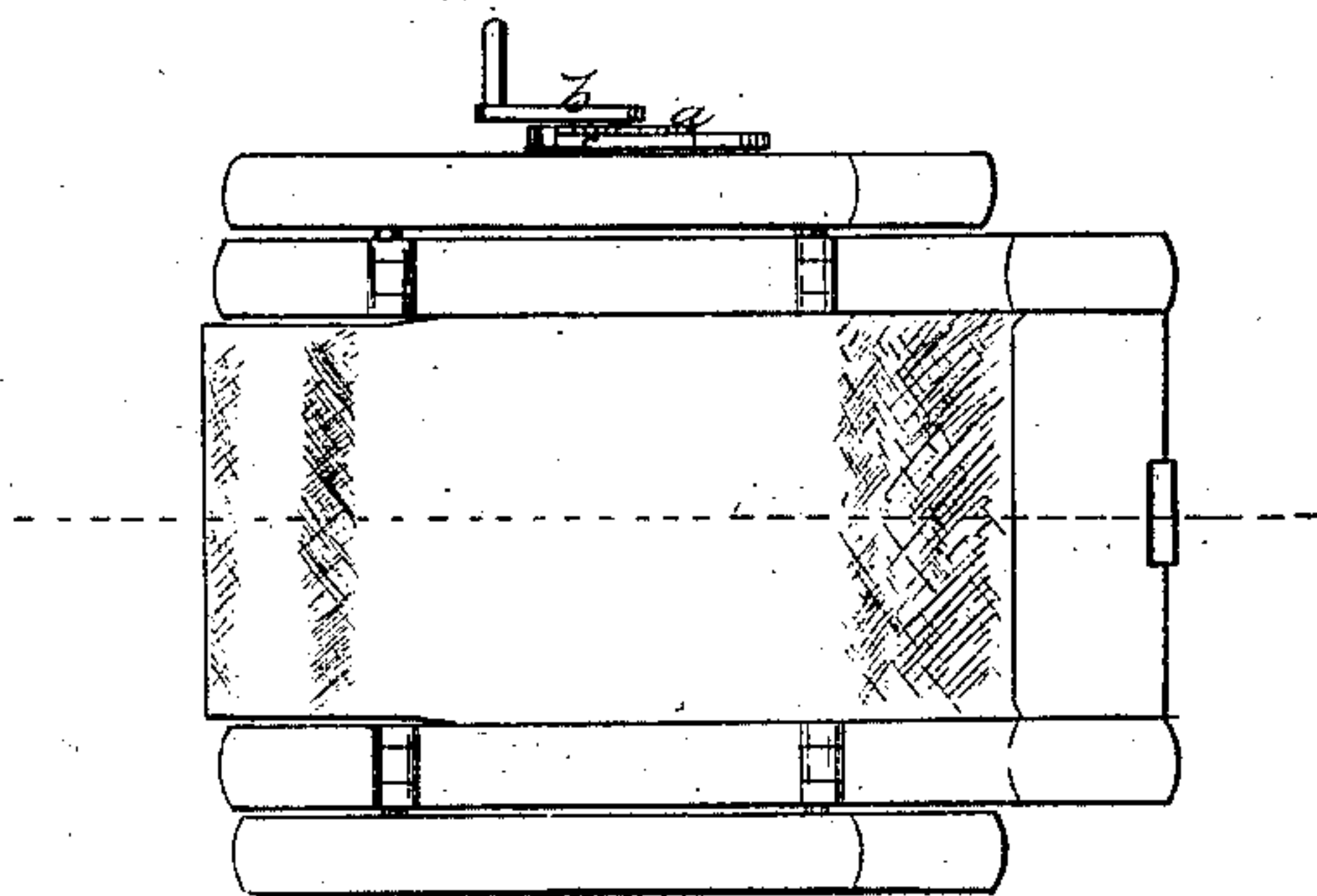
*N<sup>o</sup> 62,663.*

*Patented Mar. 5, 1867.*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*J. M. B. Bourington  
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*Inventor.*

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# United States Patent Office.

JOHN N. McMULLEN, OF WEST LIBERTY, OHIO.

*Letters Patent No. 62,663, dated March 5, 1867.*

## IMPROVEMENT IN INVALID CHAIRS.

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, JOHN N. McMULLEN, of West Liberty, in the county of Logan, and State of Ohio, have invented a new and useful Improvement in Invalid Chairs; 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, in which—

Figure 1 is a central vertical section of an invalid chair, with my improvement applied thereto.

Figure 2 is a plan or top view of the chair.

Similar letters of reference indicate like parts.

This invention relates to the manner of operating the back and foot-rest of the chair.

My invention consists in the employment of a shaft, arranged transversely under the seat of the chair, to which is connected a belt or belts, having its outer ends—those not connected to the roller—secured, respectively, to the back of the chair and to the bottom of the foot-rest; and said roller being also provided with a toothed wheel, having a crank, which, in connection with a pawl, enables the person occupying the chair to give both the back and foot-rest the desired inclination.

A designates the seat, and B the back, and C the foot-rest of the chair. The back and seat are jointed to a metallic frame, E, which permits of their being raised or lowered, as desired. To these parts I lay no claim. F is a shaft, arranged under the seat of the chair, and having its bearings in opposite sides of the chair frame. One end of the roller is provided with a toothed wheel *a*, which carries a crank, *b*, for rotating it. A pawl, *c*, is also secured to the frame of the chair, and arranged in such manner that when engaged with the toothed wheel *a* it will prevent its rotating in either direction. To the pawl is connected a hand-lever, *d*, which may be readily taken hold of by the occupant of the chair for disengaging the pawl from the toothed wheel. A belt, G, which, in the present instance, is composed of webbing, is secured to the shaft F; its other or outer ends being secured, respectively, to the back and foot-rests of the chair in such manner that when the portion of the belt between the bars H H' and the roller is taut, that between the foot-rest and the roller will be slack, and *vice versa*. The effect of this is, that on rotating the shaft in one direction, the belt on the one side of the roller draws down the back of the chair, and this, through the medium of the hinged metallic frame E, throws the foot-rest upwards. This places the chair in a position for reclining. On the other hand, when the shaft is rotated so as to wind up the belt between it and the foot-rest, it draws down the foot-rest, and, through the same medium, E, causes the back to assume a vertical position.

This means for operating an invalid chair is simple and efficient.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the shaft F, belt G, toothed wheel *a*, with its crank *b* and pawl *c*, with seat A, back B, foot-rest C, and frame E, substantially as and for the purpose described.

JOHN N. McMULLEN.

Witnesses:

R. N. JORDAN,

J. W. SMITH.