

(No Model.)

D. A. WIA NT.  
CLOCK FRAME.

No. 403,812.

Patented May 21 1889.

Fig. 2.

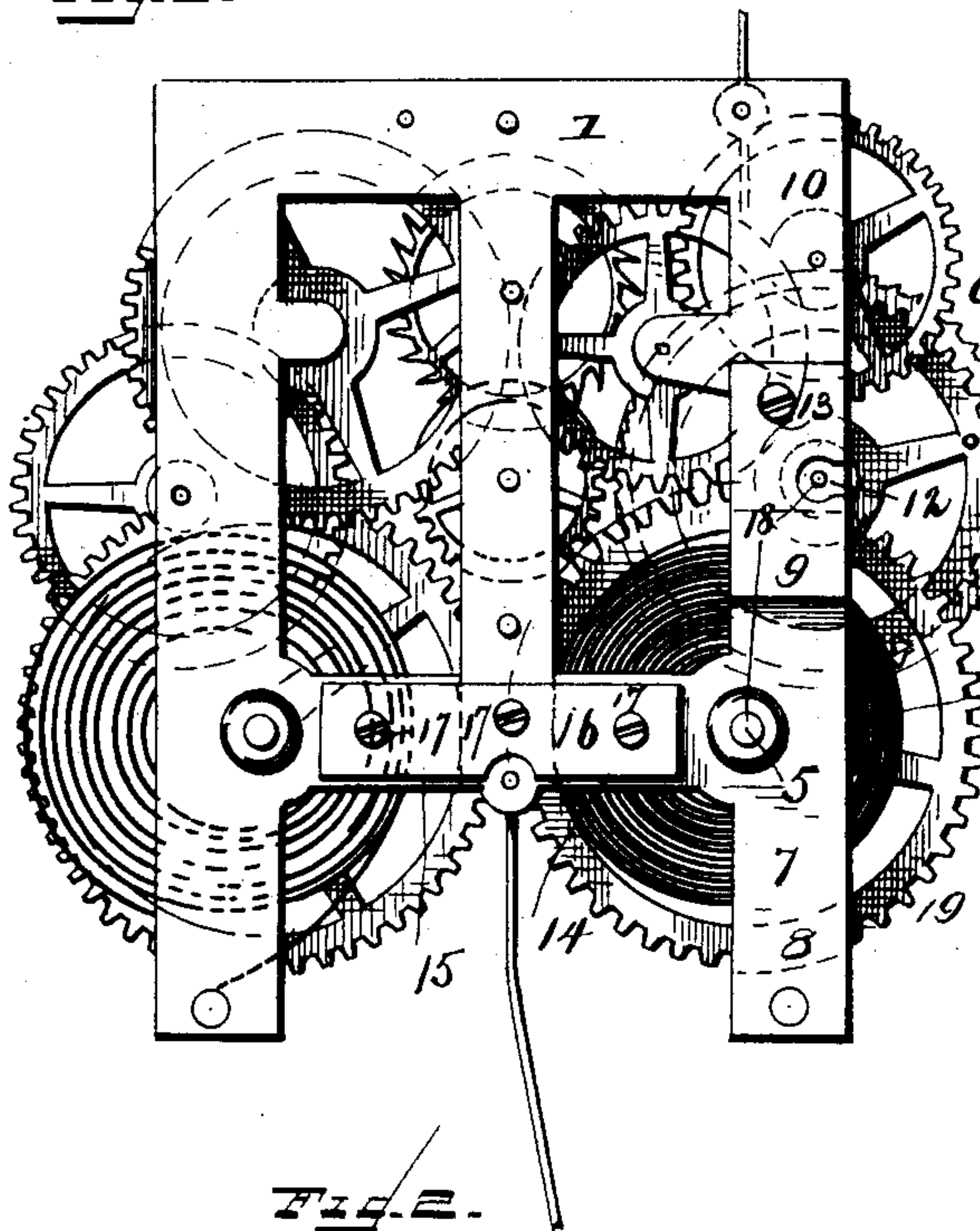


Fig. 3.

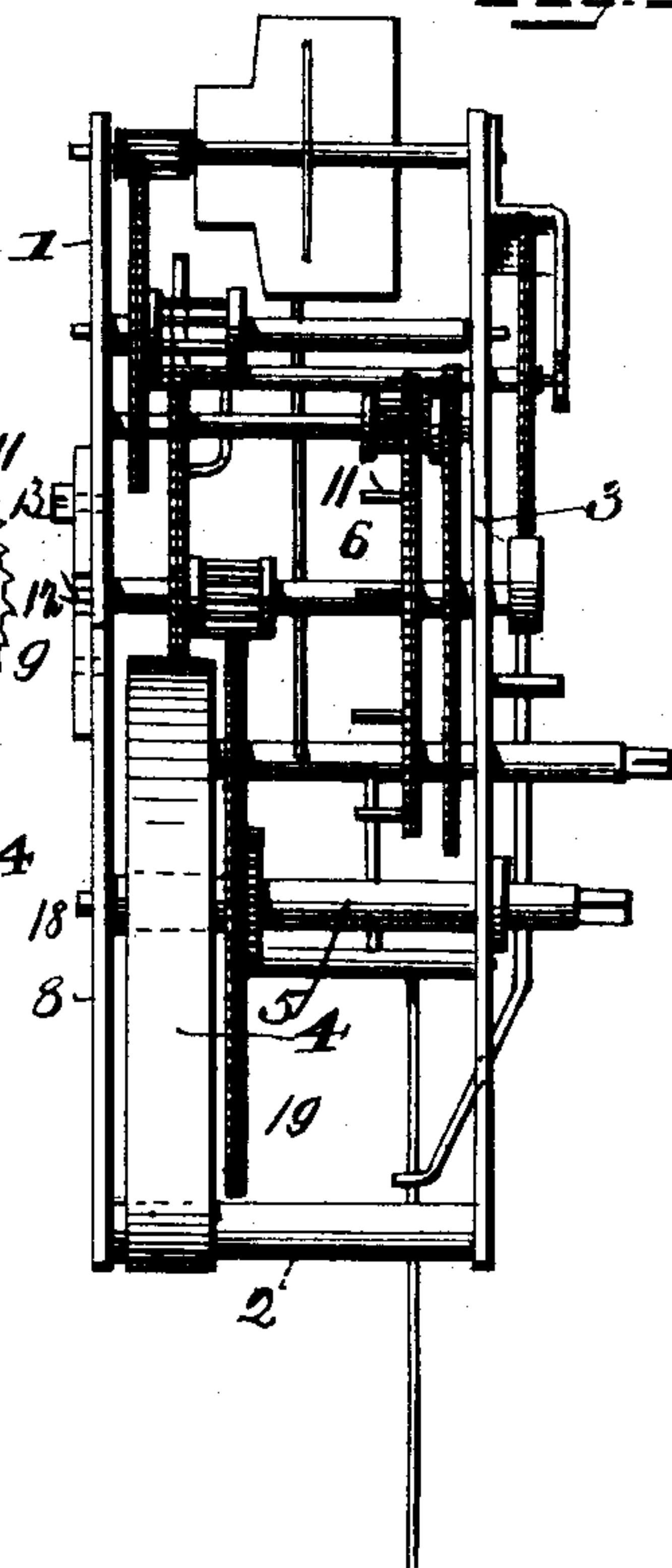
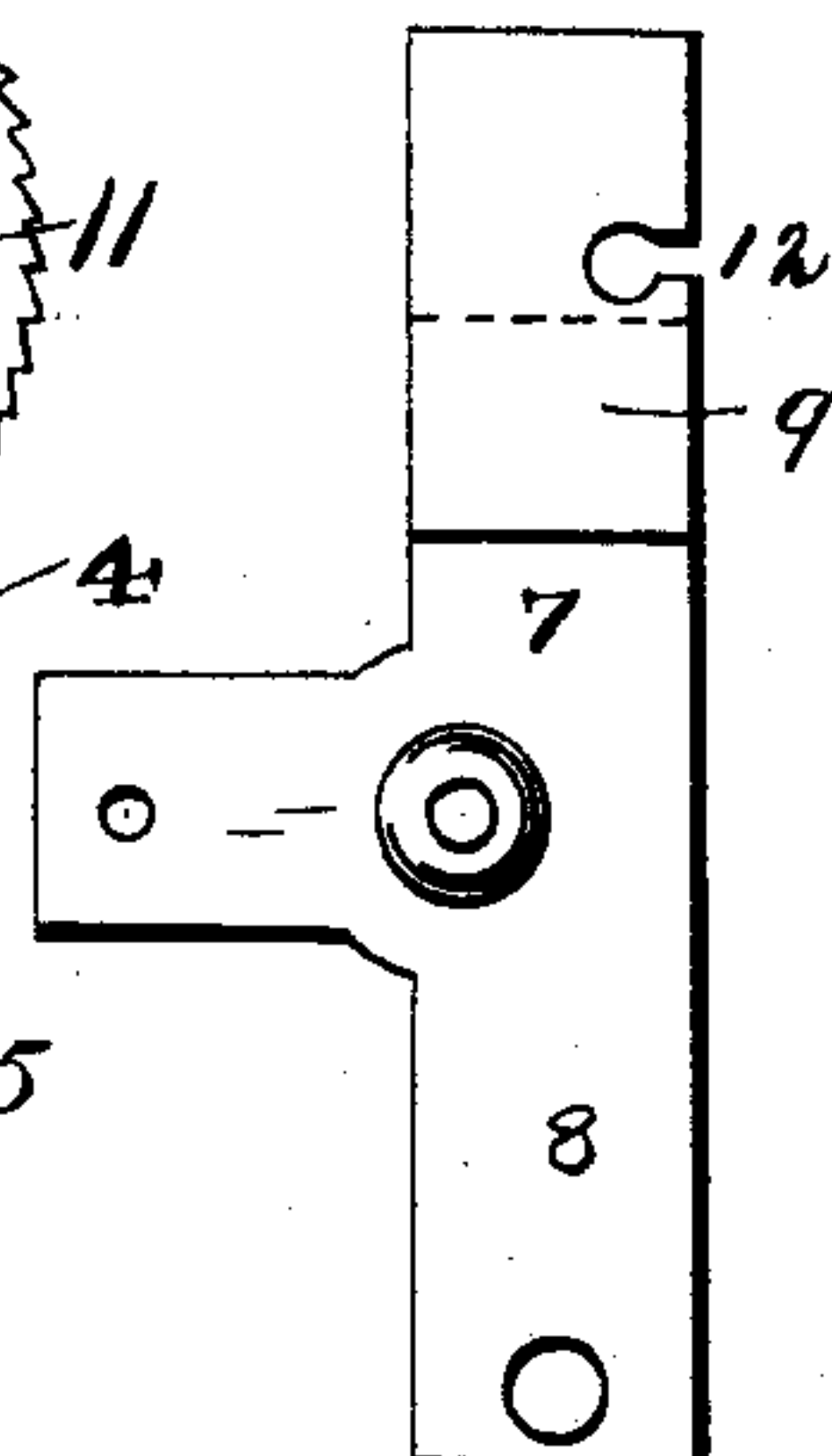
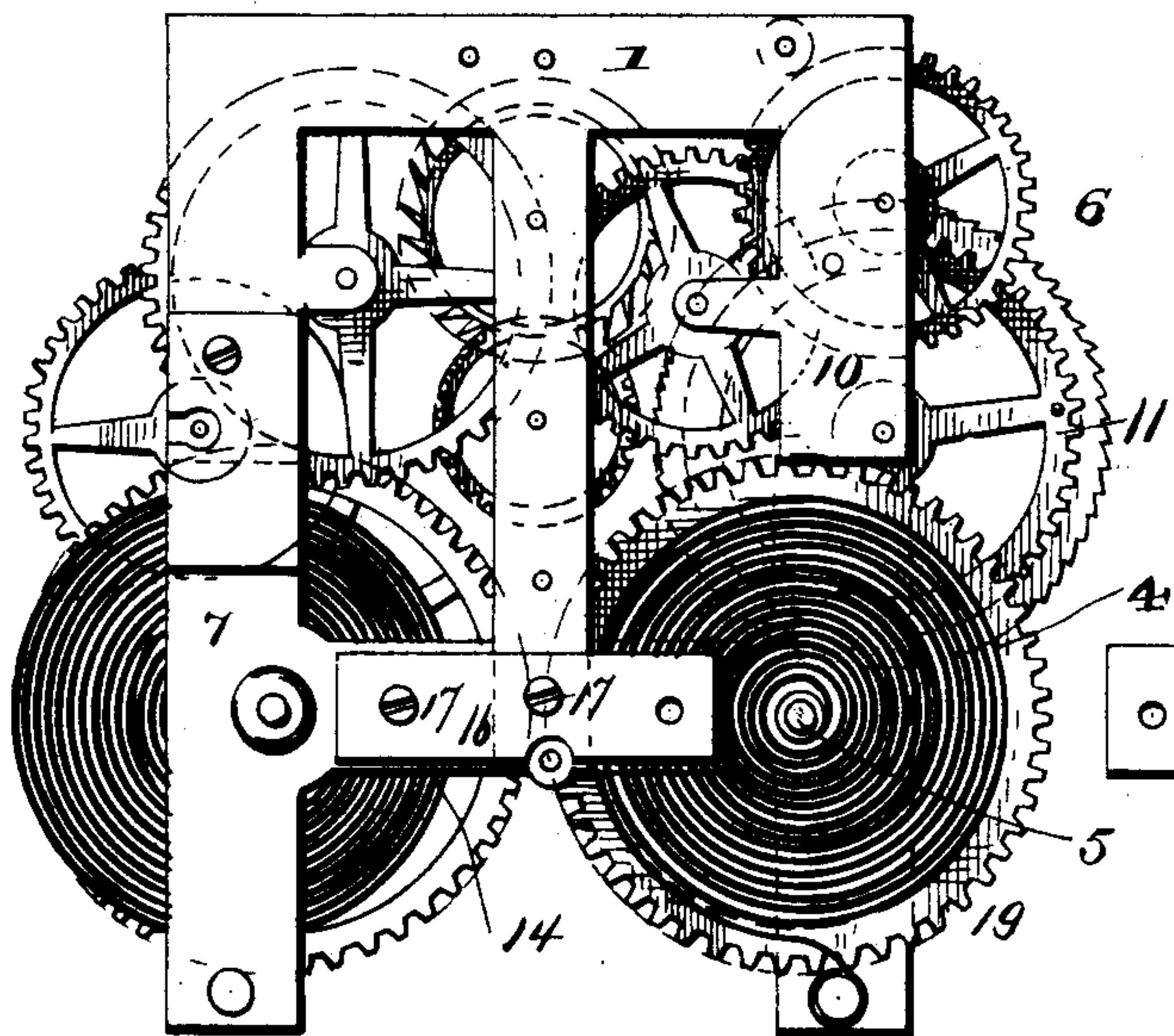


Fig. 4.



WITNESSES.

J. L. Curand  
Benj. G. Cowf.

INVENTOR.

David A. Wiant,  
by Louis Dagher & Co.  
Attorneys.



# UNITED STATES PATENT OFFICE.

DAVID A. WIANT, OF NEW BETHLEHEM, PENNSYLVANIA.

## CLOCK-FRAME.

**SPECIFICATION** forming part of Letters Patent No. 403,812, dated May 21, 1889.

Application filed January 24, 1888. Serial No. 261,751. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID A. WIANT, a citizen of the United States, and a resident of New Bethlehem, in the county of Clarion and State of Pennsylvania, have invented certain new and useful Improvements in Clock-Frames; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a rear elevation of a clock-work, showing the frame provided with my improvement. Fig. 2 is a similar view showing the removable part of the frame removed and placed at the side of the frame, and Fig. 3 is a side view of the frame and works seen at the side having the removable part.

The same numerals of reference indicate the same or corresponding parts in all the figures.

My invention has relation to clock-frames; and it consists in the improved construction and combination of parts of a clock-frame in which a portion of the plate of the frame is made detachable, so that it may be removed and the part of the works inside of the detachable part may be taken out and repaired or otherwise attended to without disturbing the other parts of the works, as hereinafter more fully described and claimed.

In the accompanying drawings, the numeral 1 indicates the back plate of the frame. 2 is one of the posts or pillars supporting the back and front plates at their proper distances. 3 is the front plate. 4 is the mainspring. 5 is the main arbor, and 6 indicates the remaining portion of the works, which have no bearing upon the invention and need no description.

The part 7 of the back plate, which incloses the mainspring and in which one end of the main arbor is journaled, is separate from the remaining portions of the plate, and the portion 8 of this detachable part is provided with a tongue or lip, 9, which overlaps the end of the portion 10 of the plate, being secured to the portion of the detachable part of the frame, and having a portion cut out to give room for the end of the arbor of the strik-

ing-wheel 11, as shown at 12, a screw, 13, serving to secure the lip to the vertical portion or bar of the frame.

The bar or portion 14 of the detachable part is secured to the horizontal bar 15 of the frame by means of a joining-bar or flat piece, 16, which is secured to the rear side of the horizontal bars of the frame, and of the detachable part by means of screws 17, fitted in registering perforations in the said bars. It will now be seen that by unscrewing the fasteningscrews and by removing the pin 18 of the main arbor, which secures it to the front plate, the main arbor, the mainspring, and the drive-wheel 19 may be removed from the works, together with the detachable frame portion, admitting of their being repaired or replaced by new parts without disturbing or in any manner affecting the remaining portions of the works.

It will be seen that by having this detachable frame portion repairs of the mainspring may be made and a considerable saving in time and labor be effected, as it will merely be necessary to remove the detachable portion of the frame and the parts of the works adhering to it, instead of removing the front plate entirely, and thereupon, after finishing repairs, bringing all the various arbors of the wheels in the trains to register and fit into their proper bearings before the plate can again be secured in its place. It follows that whenever it is desirable in a clock to have any part or parts of the works easy of access the portion of the frame covering this part or these parts may be cut off from the remaining portion of the frame and secured to the same by overlapping lips or joining plates or bars secured by screws.

I am aware that it is not new to provide a clock-movement frame which will permit of removing either of the spring-arbors with their springs without disturbing the other portion of the movement, or removing all the gearing of either side without disturbing the central portion of the movement, and I do not, therefore, broadly claim such a construction herein.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a clock-work, the combination, with the

back plate, front plate, and the ordinary train  
of gearing, of the detachable part 7, inclosing  
the mainspring and having a portion cut out  
to give room for one end of the arbor of the  
5 striking-wheel, and the bar or portion 14 of  
the detachable part secured to the bar 15 of  
the frame by the joining-bar or flat piece 16,  
secured to the rear side of the horizontal bars  
of the frame and of the detachable part by

screws fitted in registering perforations in said 10  
bars, substantially as specified.

In testimony that I claim the foregoing as  
my own I have hereunto affixed my signature  
in presence of two witnesses.

DAVID A. WIAANT.

Witnesses:

JOHN L. CRIBBS,

FRANK P. WILLIAMS.