

No. 771,108.

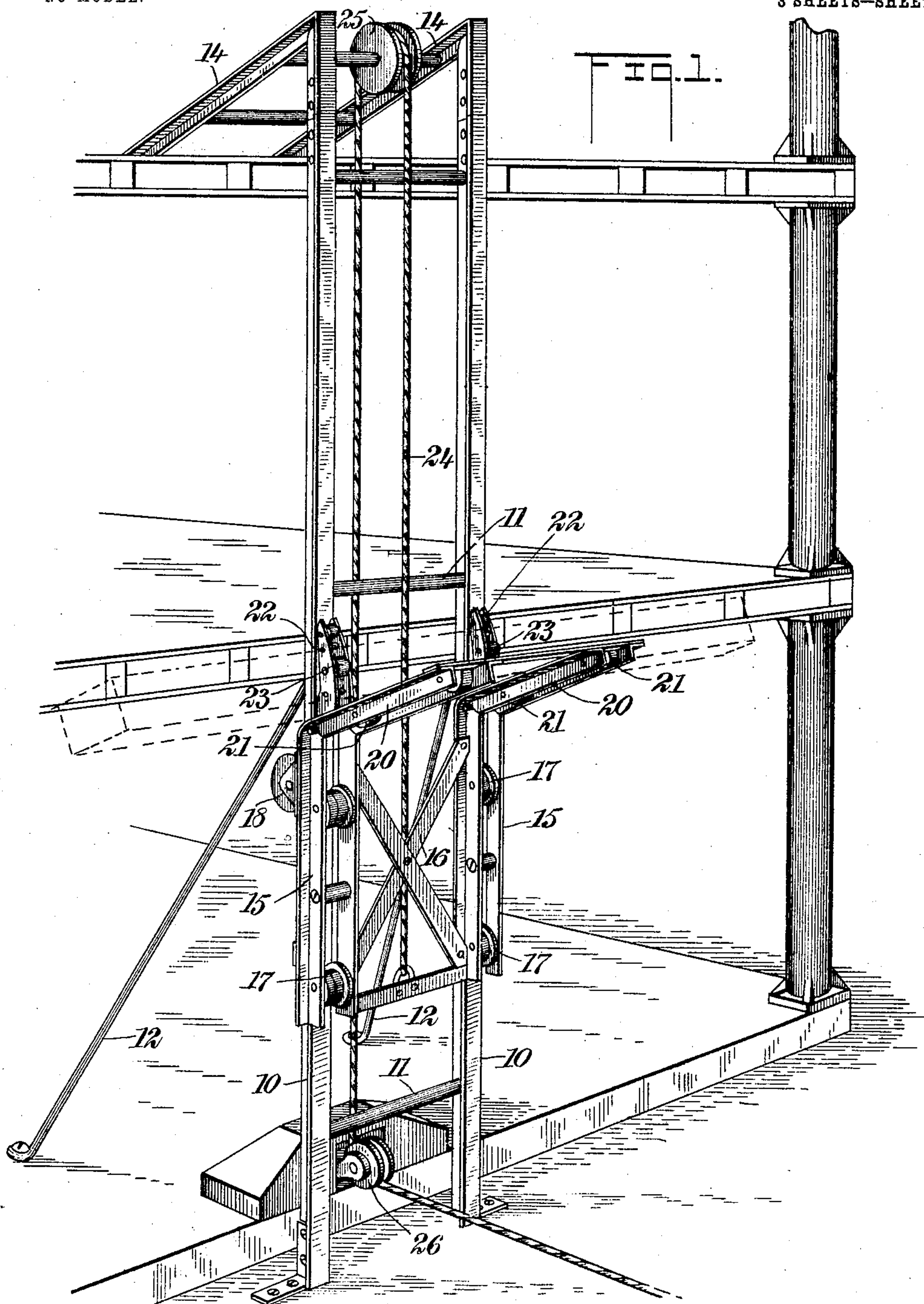
PATENTED SEPT. 27, 1904.

S. T. WALLACE.  
HOIST.

APPLICATION FILED DEC. 11, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



WITNESSES:

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ATTORNEYS

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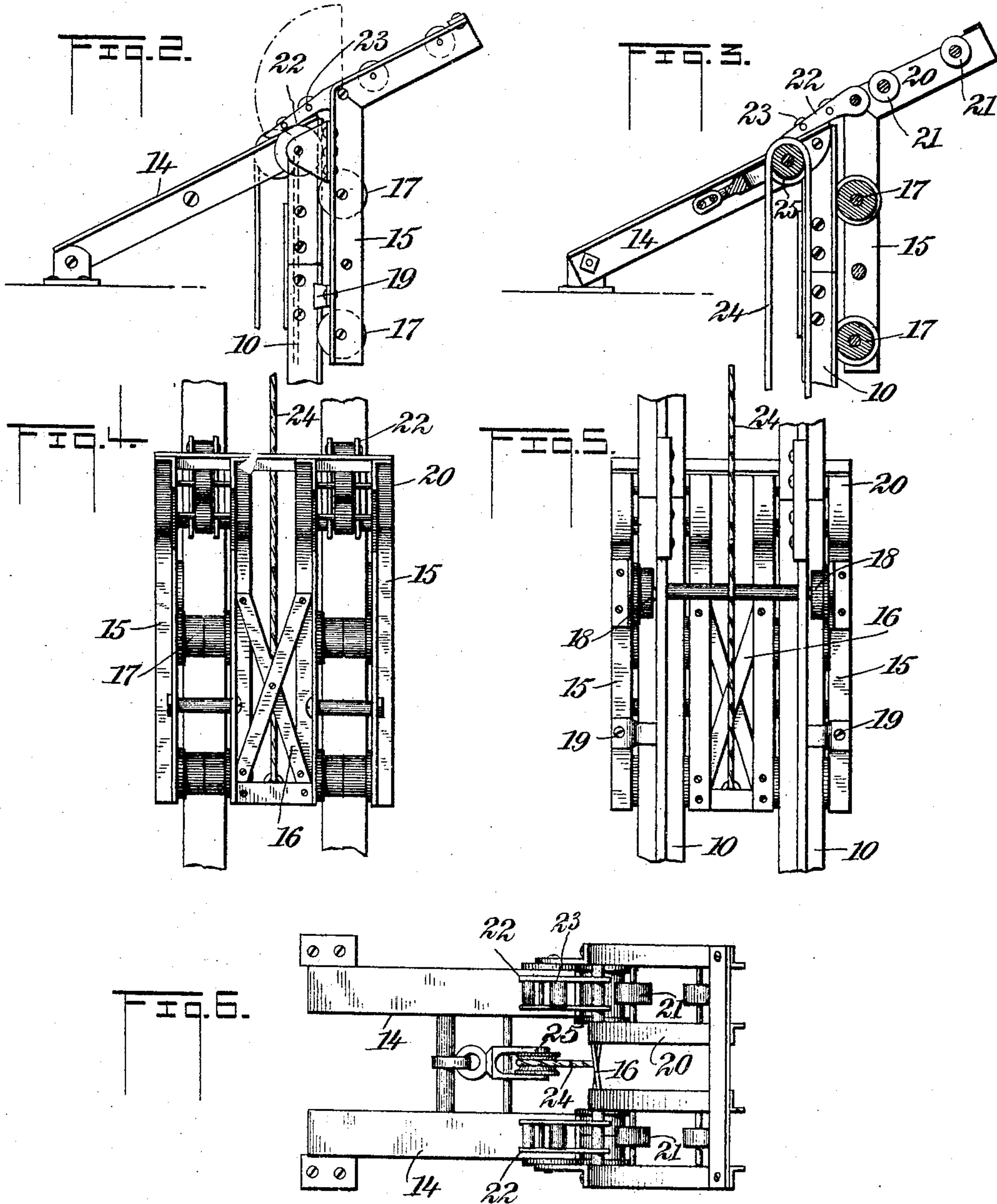
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NO MODEL.

3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

FIG. 7

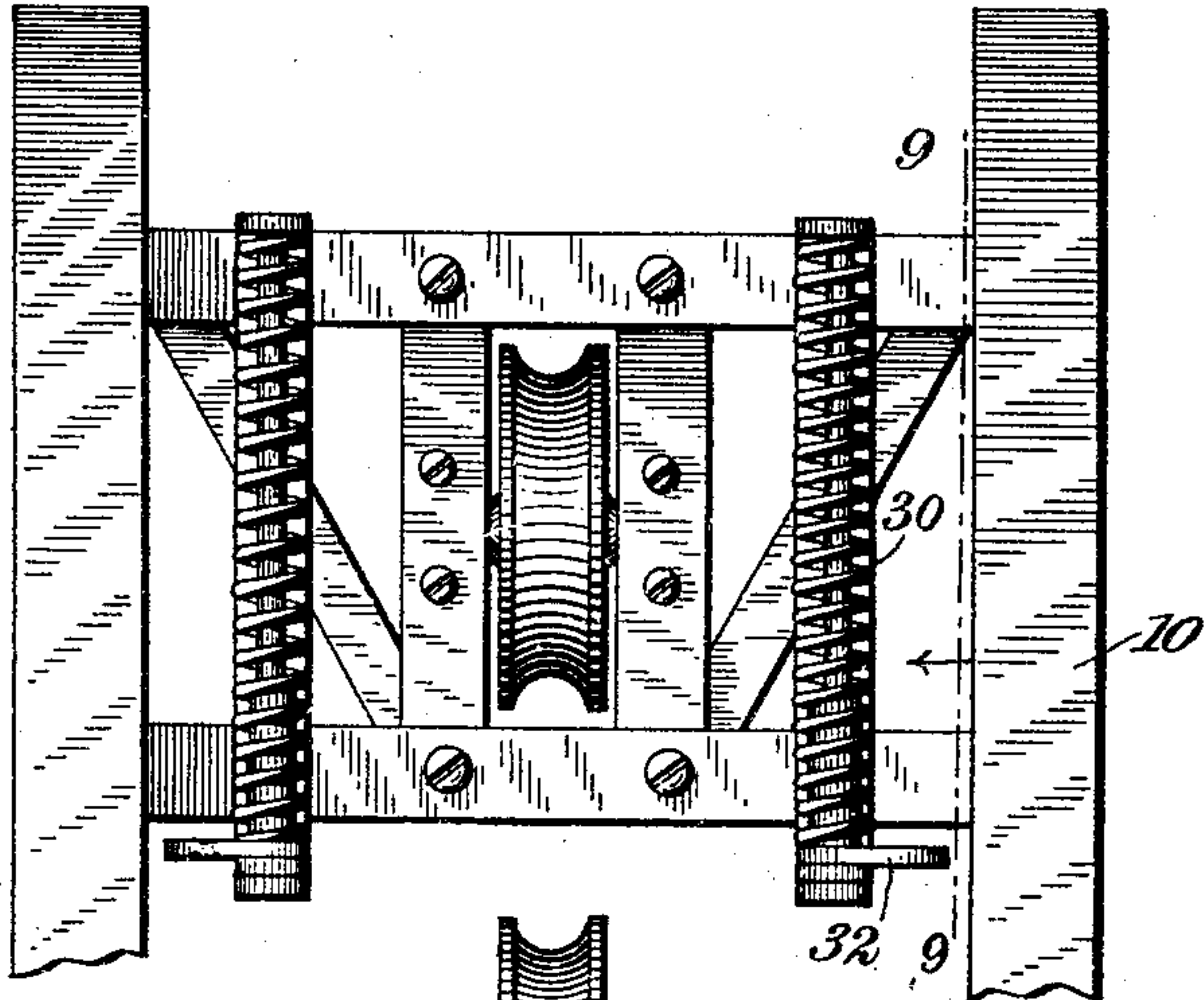


FIG. 8

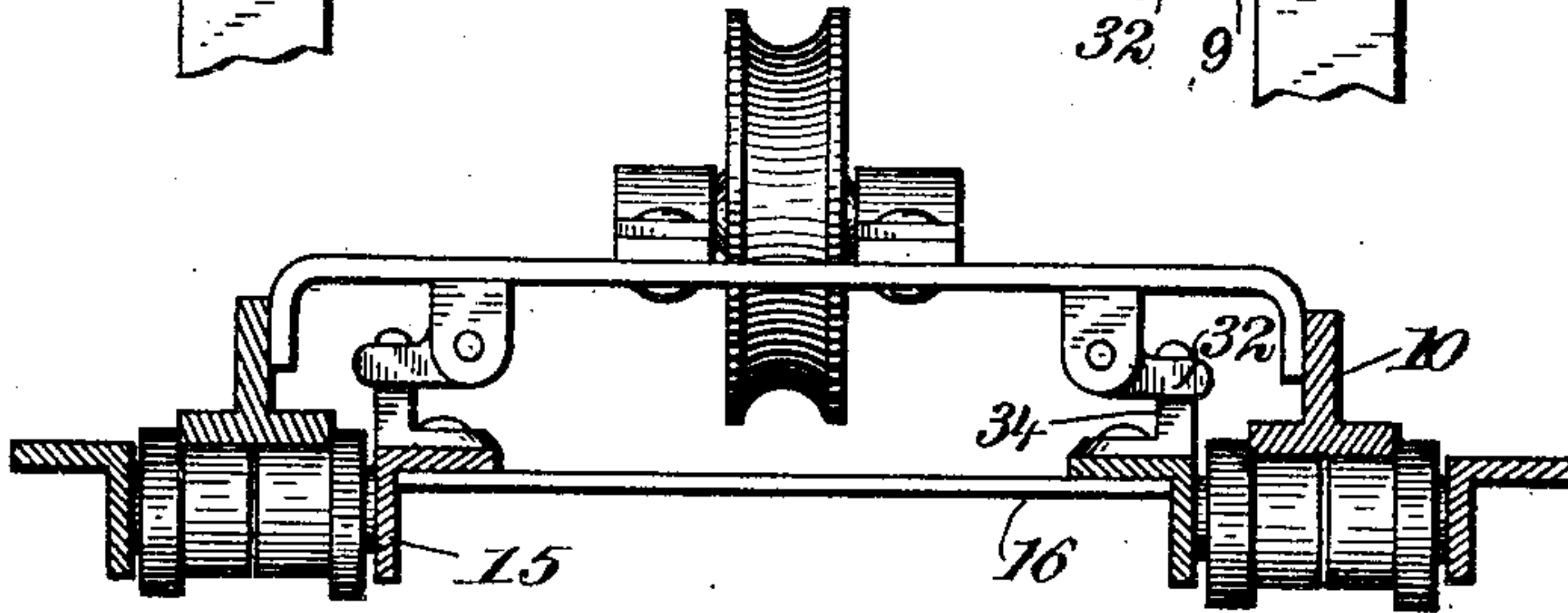
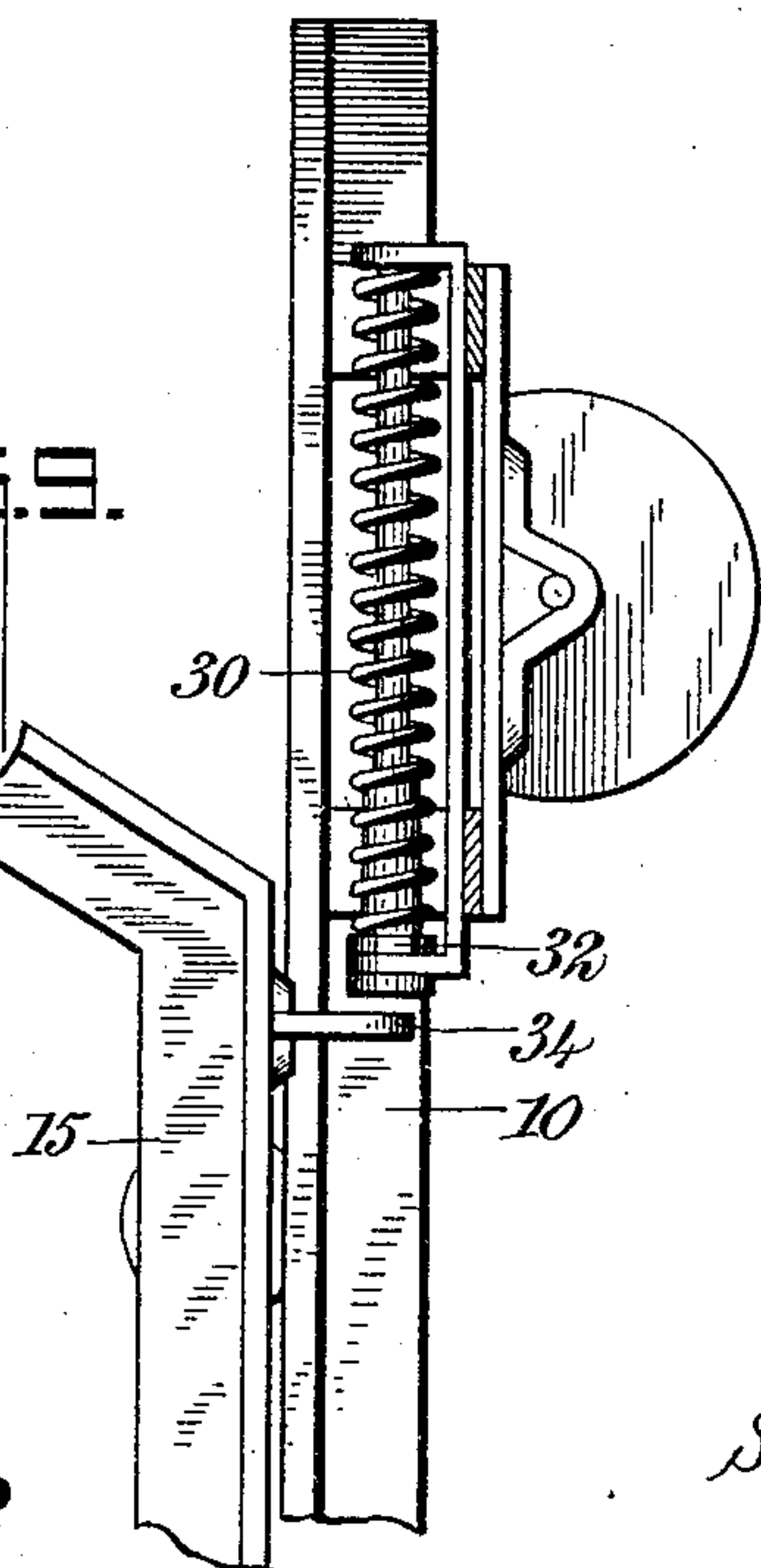


FIG. 9



WITNESSES:

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# UNITED STATES PATENT OFFICE.

SAMUEL THOMAS WALLACE, OF LOS ANGELES, CALIFORNIA.

## HOIST.

SPECIFICATION forming part of Letters Patent No. 771,108, dated September 27, 1904.

Application filed December 11, 1903. Serial No. 184,736. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL THOMAS WALLACE, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented a new and Improved Hoist, of which the following is a full, clear, and exact description.

This invention relates to a hoist intended especially for use in the construction of buildings to hoist building materials from one floor to another.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view showing the invention in use. Fig. 2 is a side elevation illustrating the carriage in discharging position. Fig. 3 is a sectional view of the same parts in the same position. Fig. 4 is a front elevation of the carriage. Fig. 5 is a rear elevation thereof. Fig. 6 is a plan view. Fig. 7 is a front view of the upper part of the track, showing a modification. Fig. 8 is a plan of the same, illustrating also the carriage; and Fig. 9 is sectional elevation on line 9 9 in Fig. 7.

10 indicates the tracks of the hoist, which are formed of T-iron and are braced together by suitable cross-bars 11.

12 indicates braces which extend out diagonally from the tracks to assist in holding them, and at their upper ends the tracks are provided with laterally-extending downwardly-inclined sections 14. As the building is advanced in height new sections of track are fastened in place, and the downwardly-inclined discharging-sections 14 are arranged to bear upon the upper floor of the building. For example, in Fig. 1 I have indicated that the first two stories of the building have been framed and that the elevator is adjusted for hoisting the building material to be used in the construction of the third story.

The carriage comprises two side portions 15, connected by suitable cross-braces 16 and carrying rollers 17, which bear on the face of

the tracks, as shown. Suitably mounted at the rear of the body of the carriage are rollers 18, which bear on the rear faces of the tracks, and in this manner the body of the carriage is held securely. Below the rollers 18 inwardly-extending guide-lugs 19 are fastened to the carriage, these lugs engaging the rear sides of the tracks and assisting the rollers 18 in holding the carriage to slide on the tracks. The side portions 15 of the carriage-body are provided with outwardly and upwardly projecting struts 20, forming the platform of the carriage, and provided with antifriction-rollers 21, so that the load may be readily rolled downward off of the said platform, as will be hereinafter fully set forth. Mounted at the upper end of each of the side portions 15 of the body of the carriage is a swinging arm 22. These arms are pivoted to swing from the position shown in Fig. 1 to that shown in Figs. 2 and 3. When the carriage is below the upper ends of the tracks, the said arms 22 stand vertically against the tracks, and the load, as indicated by the broken lines in Fig. 1, rests on the platform of the carriage and against the arms 22. The instant the carriage assumes the position shown in Figs. 2 and 3 the weight of the load will throw the arms 22 downward to the position shown in said view, and the load will then run off of the carriage onto the inclined portions 14 of the tracks. The arms 22 are provided with antifriction-rollers 23, which not only reduce the friction between the arms and tracks during the movement of the carriage, but also enable the load to run easily off of the arms when the arms drop, as shown in Figs. 2 and 3. The carriage may be mounted in any desired manner. I prefer to employ a rope or cable 24, which is attached to the carriage and passes over a sheave 25 at the top of the track, thence downward around an idler-sheave 26 at the base of the track, and from this sheave to the source of power, which obviously may be of any sort desired.

The manner of using the invention will, it is thought, be apparent from the foregoing description, and it will be seen that by means of this arrangement building materials of all sorts may be readily elevated and discharged.



As fast as the building increases in height the tracks 10 should be lengthened by fastening additional sections thereto. The hoist lies outside of the building and in practice will  
 5 be erected on the sidewalk immediately in front of the building, so that it will occupy very little space. By arranging the hoist in this manner it may be used to elevate beams of a length too great for elevation through  
 10 the interior of the building.

In order to prevent damage to the track or carriage, due to a heavy shock as the carriage strikes the top part of the track, I employ the arrangement shown in Figs. 7, 8, and 9. This  
 15 consists in arranging one or more springs 30 so that they will be compressed as the carriage reaches its uppermost position and thus serve as a yielding bumper to stop the carriage. As shown in Figs. 7, 8, and 9, the springs are  
 20 mounted on the tracks 10 and have studs 32 connected therewith, these studs being arranged to be struck by studs 34 on the carriage, thereby bringing about the result above referred to.

25 Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie  
 30 within the intent of my claims.

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

35 1. The combination of a track, a carriage arranged to run thereon, a spring mounted on the track, a stud connected with the spring and extending laterally therefrom, and a lateral stud carried by the carriage and arranged to strike the stud of the spring, for the purpose specified.

2. The combination of two tracks, an elevator 40 mounted to run thereon, the elevator comprising a body and a platform, two arms pivoted at the upper end of the body and respectively running on the tracks, and means for operating the elevator. 45

3. The combination of two tracks, an elevator comprising a body running on the tracks and a platform at the upper end of the body, two arms pivotally mounted on the body and running respectively on the tracks, and an anti- 50 friction-roller mounted in each arm.

4. The combination of two tracks, an elevator comprising a body running on the tracks and a platform at the upper end of the body, two arms pivotally mounted on the body and 55 running respectively on the tracks, an anti-friction-roller mounted in each arm, and lateral track-sections at the upper ends of the tracks, said sections being adapted to have the arms thrown down thereon as the carrier 60 reaches its uppermost position.

5. The combination of a vertically-disposed track having a laterally-disposed extension at its upper end, a carriage mounted to run on the track, said carriage including a laterally- 65 disposed platform, and an arm pivoted at the inner portion of said platform and adapted to run on the track, said arm being capable of falling down on the said extension of the track as the carriage reaches its uppermost position. 70

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

SAMUEL THOMAS WALLACE.

Witnesses:

WILLIAM F. BLOECHER,  
 W. L. EWING.