

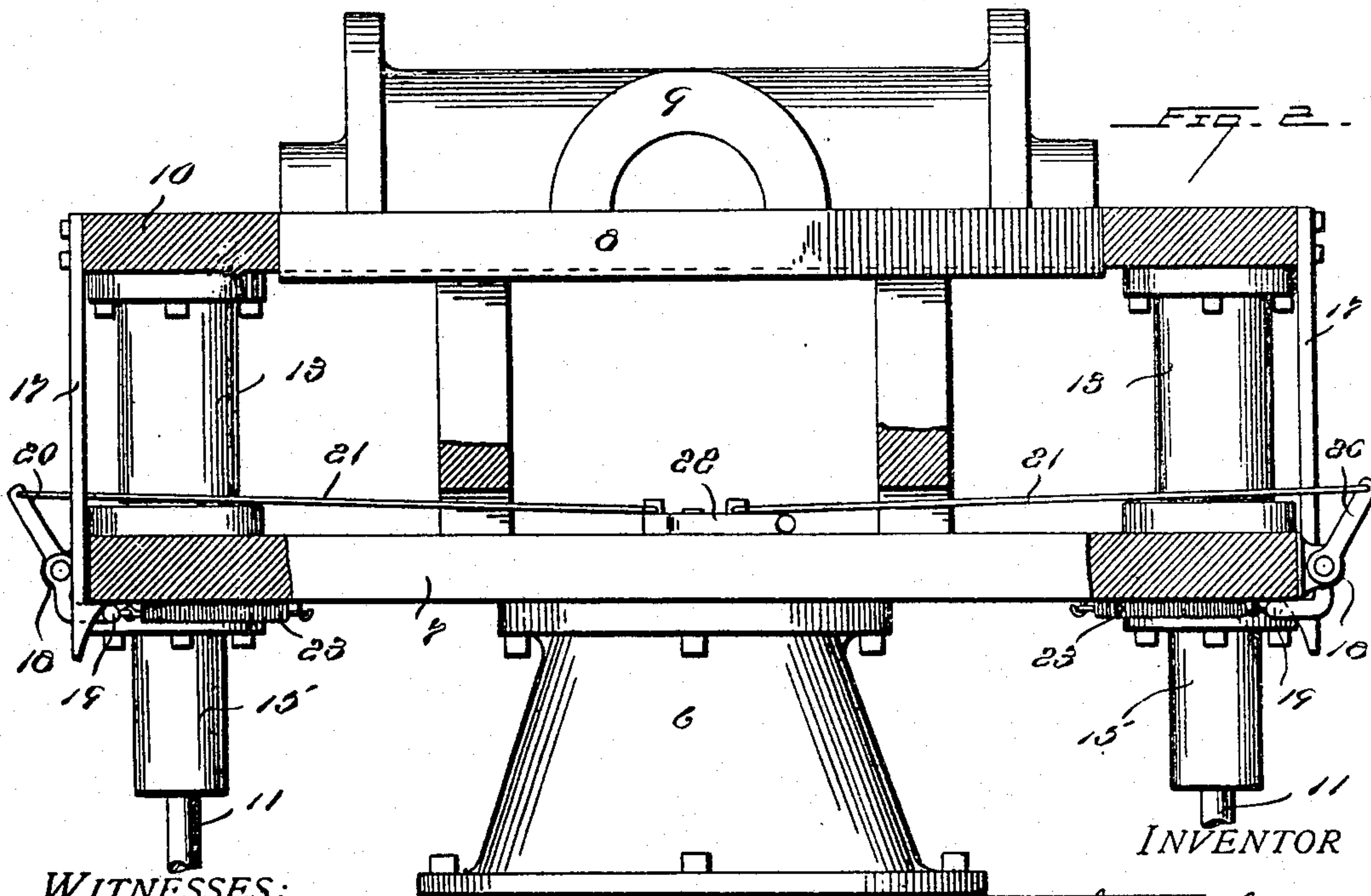
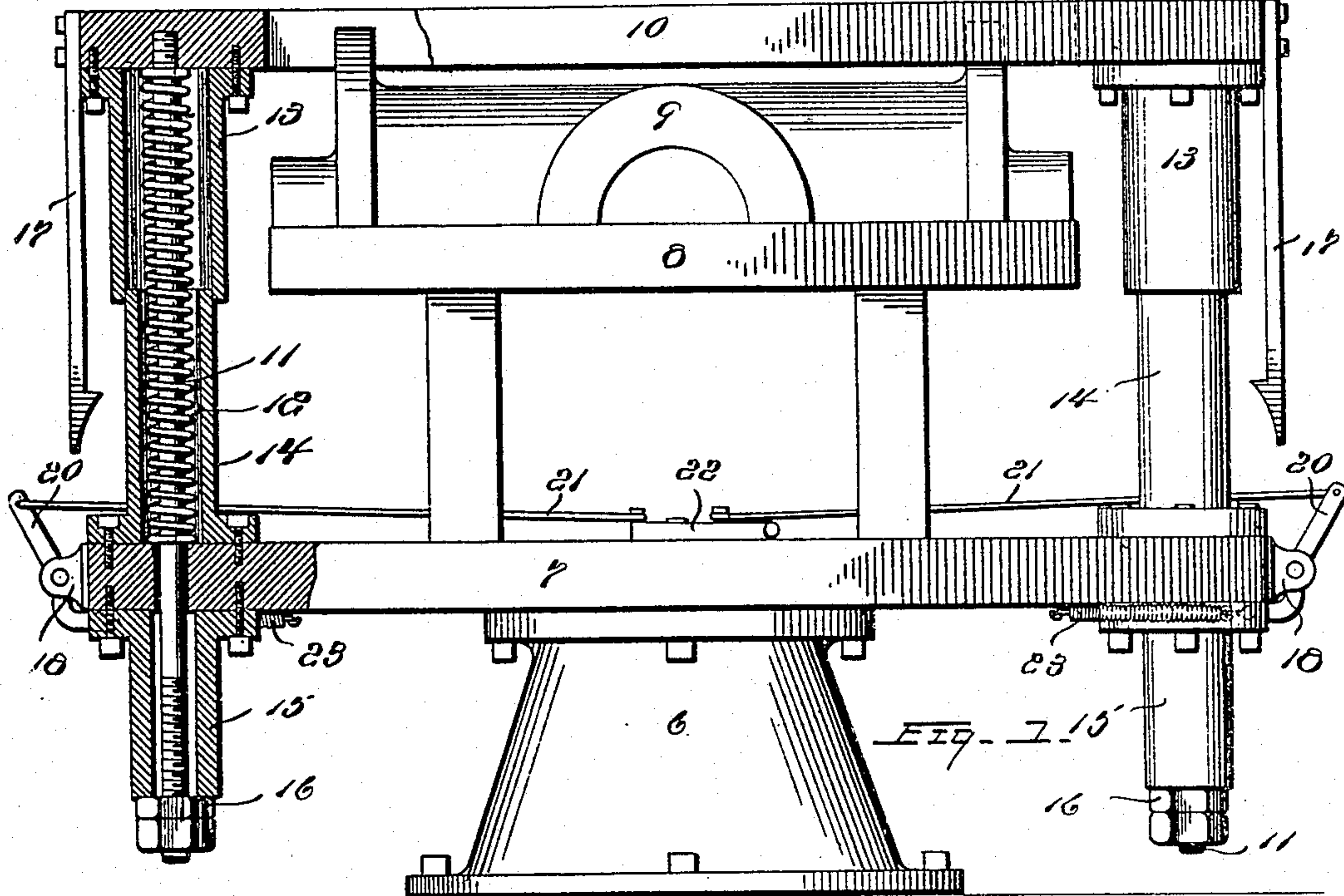
No. 825,824.

PATENTED JULY 10, 1906.

S. GRIFFITH.  
MOLDING MACHINE.

APPLICATION FILED SEPT. 28, 1905.

2 SHEETS-SHEET 1



WITNESSES:

*W. F. Koye*  
*Geo. E. Tew*

Stanton Griffith,  
By *Milo B. Stevens & Co.*  
Attorneys.

22. METAL FOUNDING

DRAFTSMAN

Molding apparatus.

Drawing pattern.

Mold lifting.

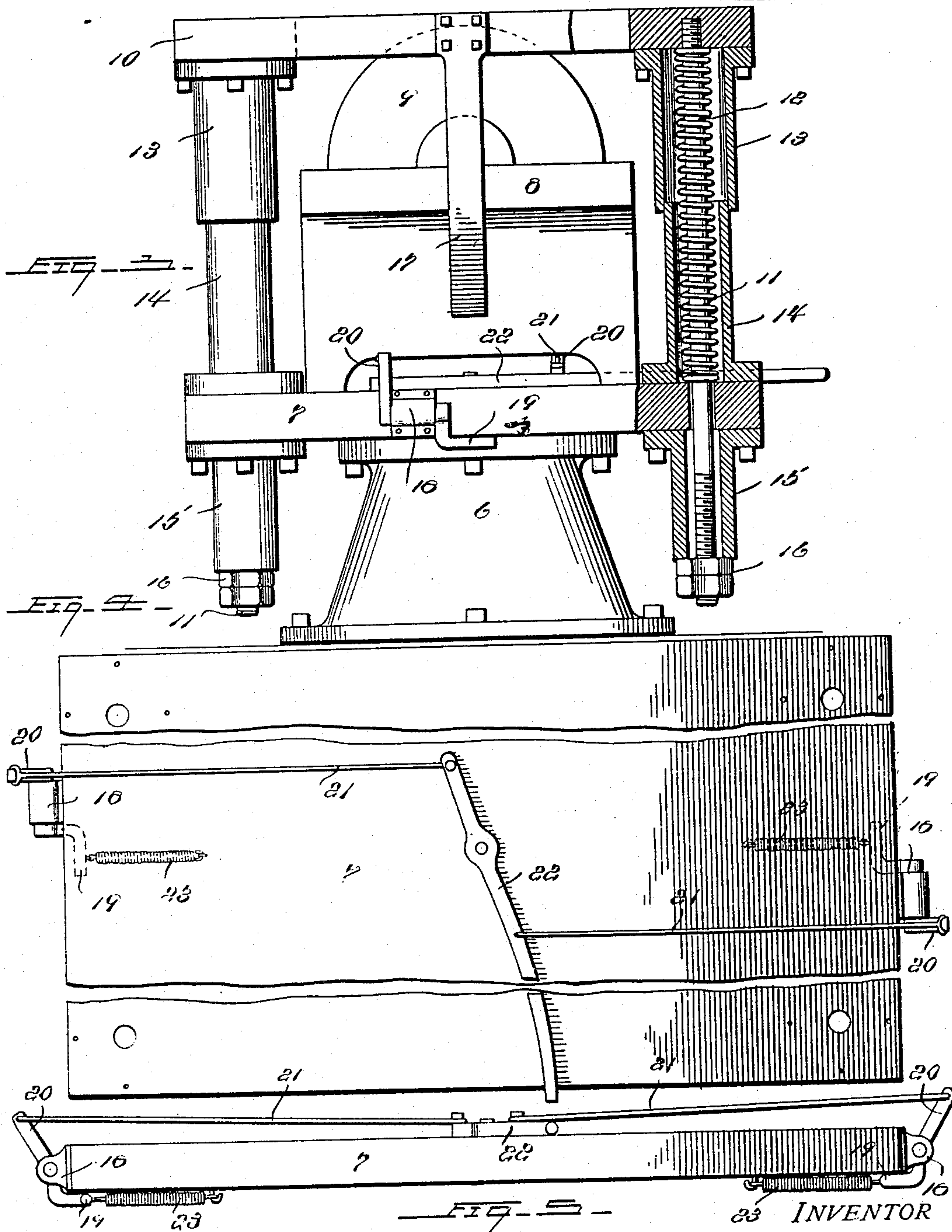
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WITNESSES:

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# UNITED STATES PATENT OFFICE.

STANTON GRIFFITH, OF BELOIT, WISCONSIN.

## MOLDING-MACHINE.

No. 825,824.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed September 28, 1905. Serial No. 280,551.

*To all whom it may concern:*

Be it known that I, STANTON GRIFFITH, a citizen of the United States, residing at Beloit, in the county of Rock and State of Wisconsin, have invented new and useful Improvements in Molding-Machines, of which the following is a specification.

This invention is a machine used for making sand molds for castings, and comprises means for supporting a pattern in the flask-section and for stripping same therefrom, the stripping-plate being spring-actuated to lift the flask-section from the pattern when the mold is completed. Improved means are provided for holding the stripping-plate and flask-section thereon down to the pattern when molding and for releasing said means and allowing the springs to lift the stripping-plate when the mold is ready.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of the machine with the stripping-plate raised. Fig. 2 is a similar view with the stripping-plate pressed down. Fig. 3 is an end elevation, partly in section. Fig. 4 is a plan showing the trips and lever for releasing the spring-catches. Fig. 5 is an edge view of the same.

Referring specifically to the drawings, 6 indicates a base upon which the machine is supported. Mounted upon the base is a base-plate 7, upon which is blocked up and supported the pattern-plate 8, carrying the pattern 9. The stripping-plate is indicated at 10 and receives the flask-section thereon. The stripping-plate has the usual opening through which the pattern may be advanced or retracted. Depending from the stripping-plate, preferably at the corners thereof, are long bolts 11, around which are coiled springs 12 in compression between the under side of the stripping-plate and the upper side of the base-plate 7. These bolts and springs are inclosed in tubular telescoping casings formed of sections 13, fixed to the under side of the stripping-plate, and sections 14, fixed to the upper side of the base-plate, and these tubes act as guides for the up-and-down movement of the stripping-plate, and so keep the same true and in exact position with respect to the pattern. Secured to the under side of the base-plate 7 are tubular guides 15, which are in line with the guides above mentioned and through which the bolts 11 work. Said bolts carry stop-nuts 16, which strike the ends of the tubes 15, and thus stop the lift of the stripping-plate.

Depending from the ends of the stripping-plate 10 are spring-catches 17, which are preferably located to snap and hook under the ends of the base-plate 7. These catches are disengaged from the base-plate by means of trips, each of which consists of a cranked rod, which swings in a fixture 18, one end 19 of the rod being located under the end of the base-plate in position to lie behind the hook when the same is engaged and the other end 20 projecting upwardly and connected by a wire 21 to a trip-lever 22. Springs 23, connected to the arms 19, serve to retract the trips.

In the operation of the machine the flask-section—either the cope or the drag—is placed on the stripping-plate and forced down therewith, compressing the springs 12 and engaging the spring-catches under the base-plate. This holds the stripping-plate and flask-section down, with the pattern projecting through the hole in the stripping-plate and into the flask. The sand is then put in. When the mold is complete, the trip-lever 22 is thrown, causing the trips to disengage the catches, allowing the springs to raise the stripping-plate and flask and to clear the pattern, which remains stationary.

The device being spring-actuated dispenses with all outside power for effecting the stripping operation. Adjustment to limit the lift of the stripping-plate may be effected by changing the stop-nuts 16. The springs and guides are inclosed and protected from sand, as shown. The machine is shown with four springs and guides; but this number may be increased, if desired.

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

1. In a molding-machine, the combination with a base and fixed pattern-plate thereon, of a stripping-plate slidable up and down in guides on the base, and having catches engageable with the base to hold the stripping-plate down, and springs tending to lift said plate.

2. In a molding-machine, the combination with a base having a pattern-holder thereon, of a stripping-plate movable up and down over the pattern, tubular guides between the base and stripping-plate, springs coiled in said guides and tending to lift said plate, and catches engageable between said base and plate, to hold the latter down.

3. In a molding-machine, the combination with a base-plate having a pattern-holder



thereon, of a stripping-plate movable up and down over the pattern, tubular telescoping guides between said plate and base, bolts extending downwardly from said stripping-plate and through the guides and the base-plate and having stops on the under side thereof, springs coiled around the bolts in the guides and tending to lift the stripping-plate, and catches engageable between said plate and the base.

4. In a molding-machine, the combination with a pattern-supporting base-plate, and a spring-actuated stripping-plate movable up

and down over the same, of catches carried by the stripping-plate and engageable with the base-plate to hold the former down, and means to simultaneously disengage the catches.

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

STANTON GRIFFITH.

Witnesses:

T. D. WOOLSEY,  
BENJAMIN FOSSE.