

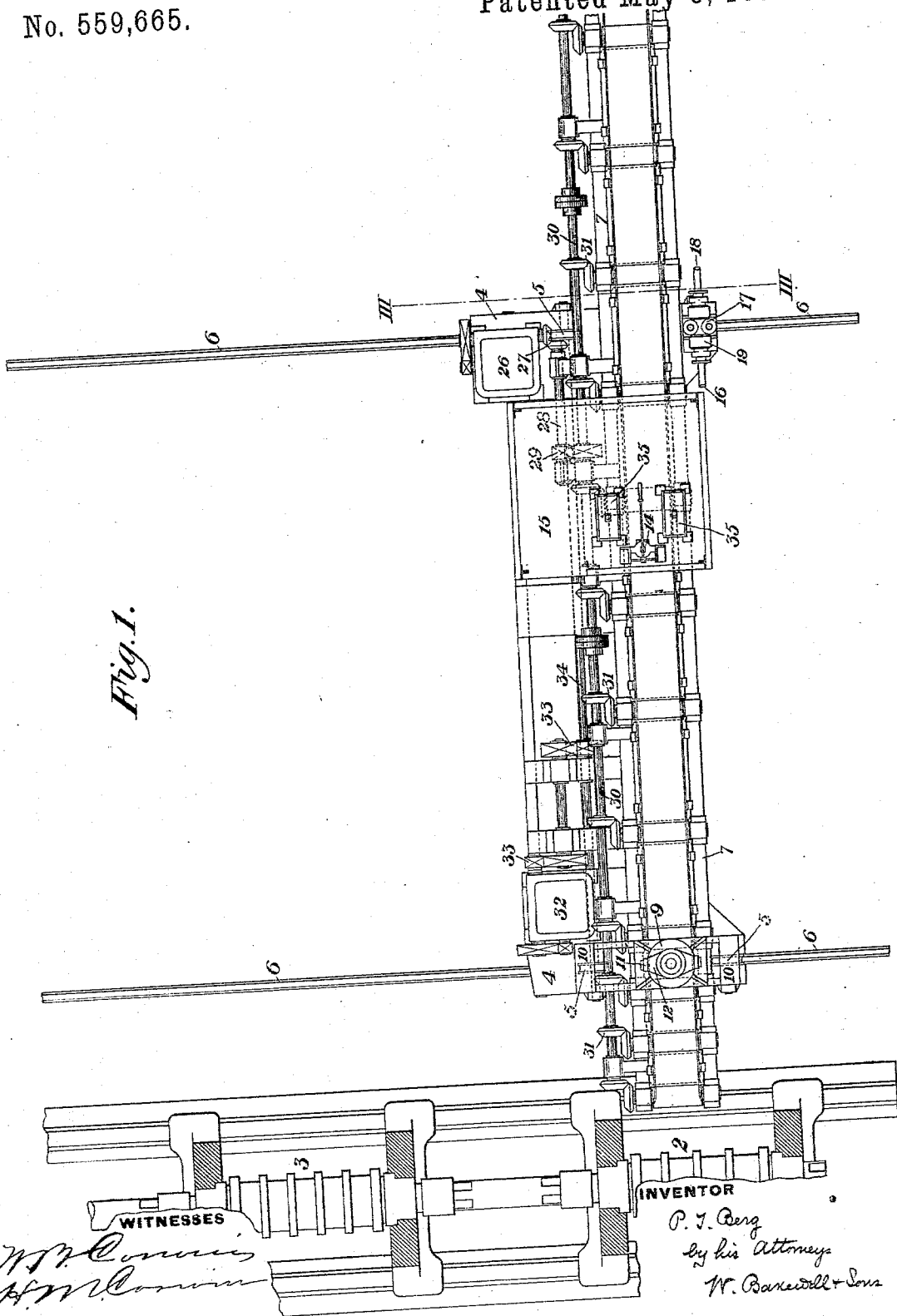
(No Model.)

P. T. BERG.
FEED TABLE FOR ROLLING MILLS.

No. 559,665.

Patented May 5, 1896.

Fig. 1.



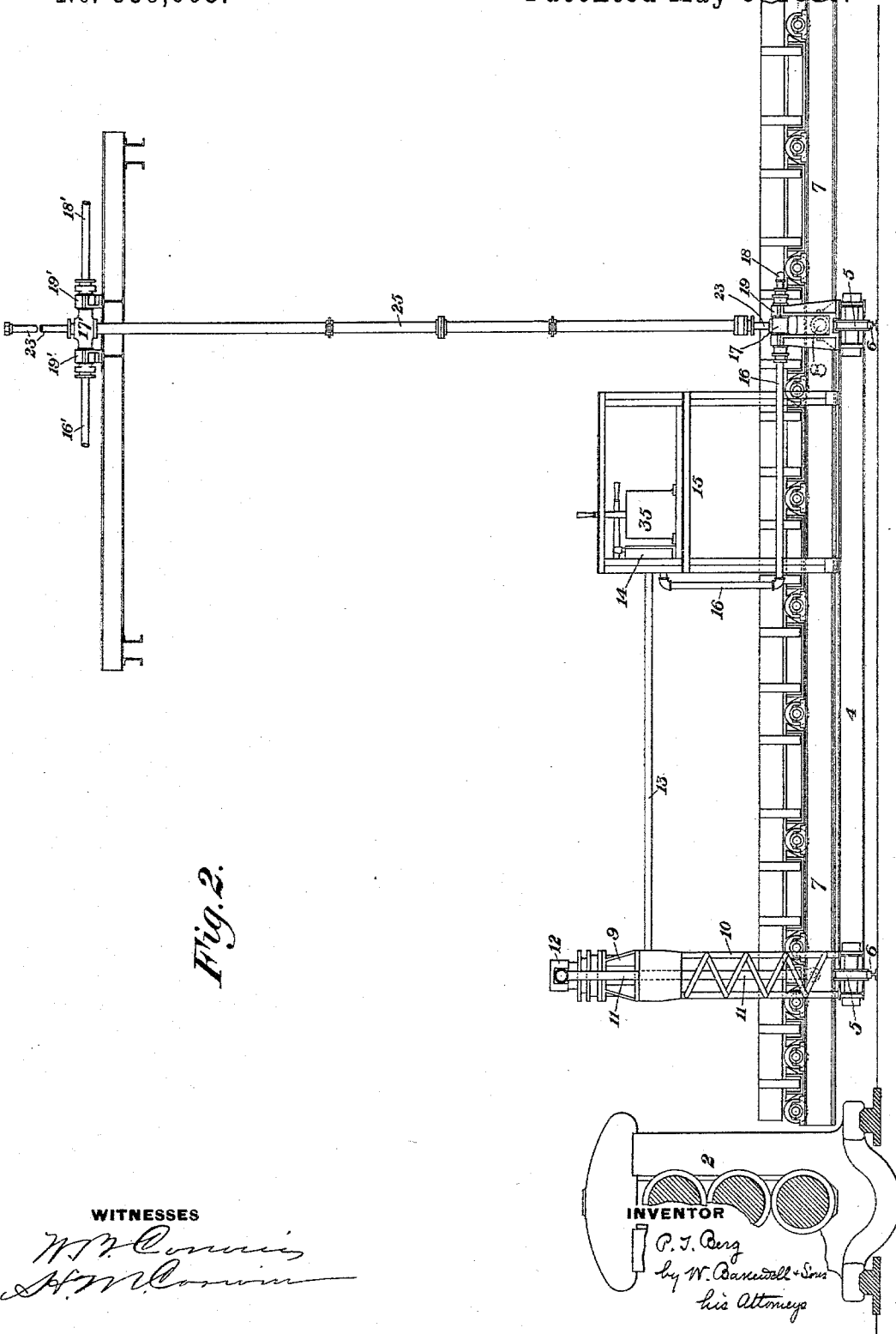
(No Model.)

4 Sheets—Sheet 2.

P. T. BERG.
FEED TABLE FOR ROLLING MILLS.

No. 559,665.

Patented May 5, 1896.



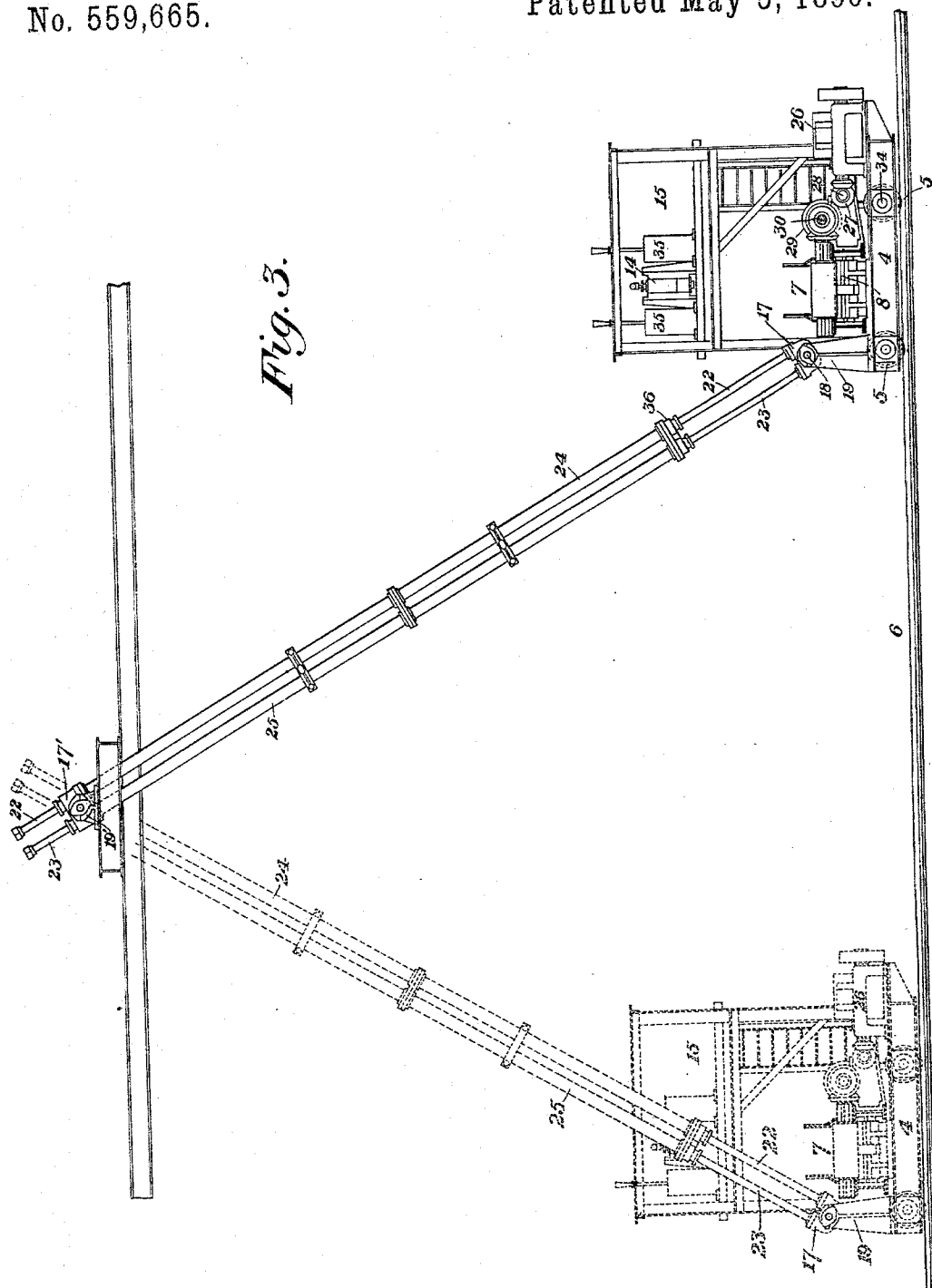
(No Model.)

4 Sheets—Sheet 3.

P. T. BERG.
FEED TABLE FOR ROLLING MILLS.

No. 559,665.

Patented May 5, 1896.



WITNESSES

W. P. Corwin
A. M. Corwin

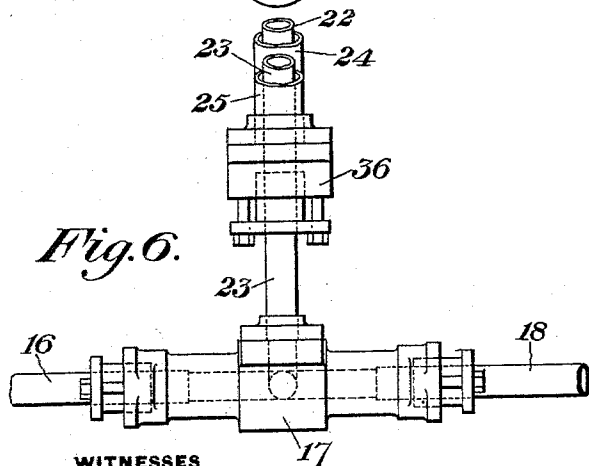
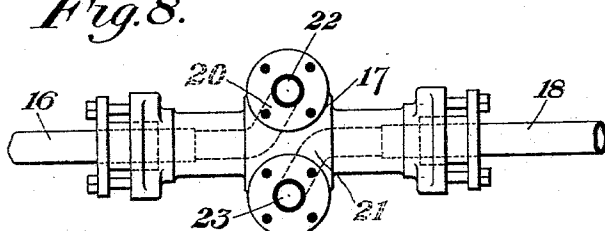
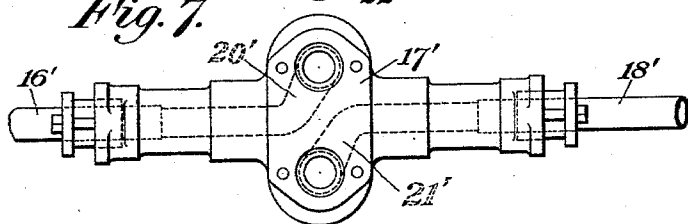
INVENTOR

P. T. Berg
by his Attorney
W. B. Bessell + Sons

4 Sheets—Sheet 4.

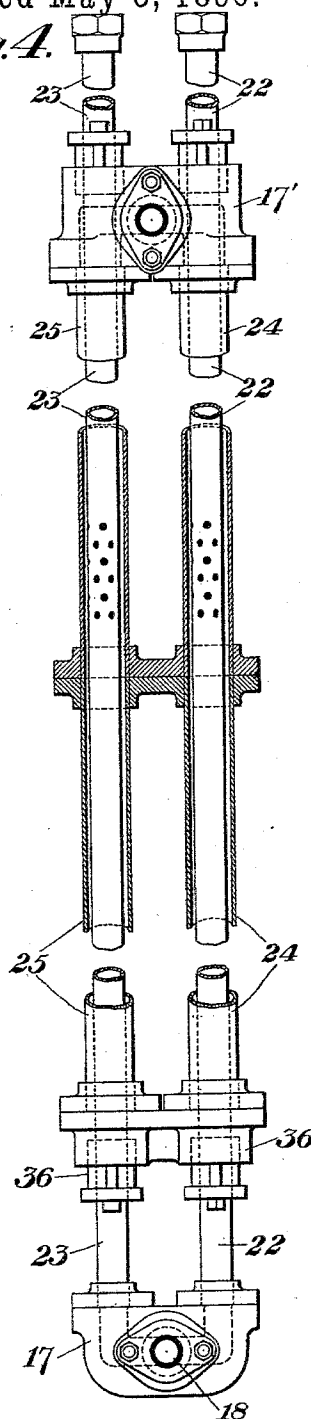
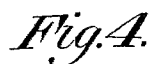
Patented May 5, 1896.

No. 559,665.



WITNESSES

W. H. Corwin
H. M. Corwin



INVENTOR

C. J. Berg
by his Attorneys
W. B. Russell & Sons

UNITED STATES PATENT OFFICE.

PER TORSTEN BERG, OF MUNHALL, PENNSYLVANIA.

FEED-TABLE FOR ROLLING-MILLS.

SPECIFICATION forming part of Letters Patent No. 559,665, dated May 5, 1896.

Application filed February 1, 1894. Serial No. 498,727. (No model.)

To all whom it may concern:

Be it known that I, PER TORSTEN BERG, of Munhall, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Feed-Tables for Rolling-Mills, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved feed-table. Fig. 2 is a side elevation of the same. Fig. 3 is a cross-section on line III III of Fig. 1. Fig. 4 is an enlarged elevation, partly in section, of my improved fluid connections. Fig. 5 is a detail side elevation of the upper part of Fig. 4. Fig. 6 is a similar view of the lower part, and Figs. 7 and 8 are plan views of Figs. 5 and 6.

Like symbols of reference indicate like parts in each view.

My invention relates to the operation of feed-tables for rolling-mills, and more especially to those wherein side movements and vertical movements are imparted thereto; and it consists in improved means for performing these movements.

In the drawings, 2 and 3 represent two sets of three-high rolls in line with each other, and 4 a movable car in front of the same and carried upon wheels 5, resting upon tracks 6. Upon this car is mounted the oscillating feed-table 7, which is pivoted near its rear end at 8 to the car and extends beyond both ends of the car.

9 is a hydraulic cylinder mounted upon posts 10, secured to the car, this cylinder having depending rods 11, secured to a cross-head 12, carried by its plunger, which rods are pivoted to the table at their lower ends. A fluid-supply pipe 13 leads from a valve 14 in an elevated pulpit 15 to this cylinder 9, and from this valve a pipe 16 leads into one end of a hollow casting 17. From the other end of the casting a similar pipe 18 leads to the valve, these pipes being suitably packed at their entrance to the casting, so that it may rotate thereon, it being supported in suitable bearings 19. Within the casting are bent passages 20 and 21, leading from the pipes 16 and 18 to perforated pipes 22 and 23, which extend upwardly and pass through a

casting 17', supported in bearings 19', which are preferably supported upon beams above the central point of the car's travel, though this is not necessary. Surrounding the pipes 22 and 23 and secured in the lower face of the casting 17' are the pipes 24 and 25, within which the perforated pipes 22 and 23 slide telescopically as the car moves back and forth upon its track, suitable packing-boxes 36 being located at the lower ends of pipes 24 and 25. Bent passages 20 and 21 lead within the casting 17' from the pipes 24 and 25 to the stationary supply and exhaust pipes 16' and 18', and it is evident that the fluid supply will pass to the cylinder 9 in any position of the car and the waste fluid will similarly pass away through the other telescoping pipe.

To rotate the feed-rolls in either direction I provide an electric motor 26, which is supported upon the car at one side of the feed-table. This motor is connected by suitable bevel-gearing 27 with a counter-shaft 28 upon the feed-table, which is provided with gearing 29, connecting it with shaft 30, having bevel-gear connections 31 with the feed-rolls. A second motor 32, supported upon the car at one side of the table, is provided with gearing 33, connecting it with the shaft 34, which carries the wheels 5, this motor giving the table its lateral motion in front of the rolls. Suitable conducting-wires lead from these motors to rheostats 35 in the pulpit, by means of which the movements of the car and the rolls are controlled, the circuit-wires leading loosely to the rheostats from any suitable point.

The advantages of my invention will be apparent to those skilled in the art, since the movements are all under the control of a single operator, the parts are simple, light, and few in number, and the feed-rollers are unobstructed.

Many variations in the form, construction, and arrangement of the parts of my device may be made by the skilled mechanic without departure from my invention, since

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

1. A movable car carrying a pivotally-mounted frame, a pair of oscillatory telescoping pipes leading thereto, in combination with

a casting and supply and exhaust pipes leading axially into opposite ends of the casting; substantially as described.

2. The combination with a car laterally
5 movable in front of the rolls, of a motor mounted on the car and connected with suitable mechanism for giving to the car its lateral motion, a feed-table having a vertically-tilting movement pivotally mounted on the
10 car and having a series of feed-rollers, a second motor also carried by the car connected to the feed-table and adapted to move the same vertically on its pivot, a third motor

connected with the mechanism for operating the feed-rollers, and a fluid-supply device 15 connected with oscillatory supply-pipes, said device having supply and exhaust pipes leading axially into opposite ends thereof; substantially as described.

In testimony whereof I have hereunto set 20 my hand.

PER TORSTEN BERG.

Witnesses:

W. H. CORBETT,
H. H. HERVEY.