

(No Model.)

A. B. STEVENS.
CONVERTIBLE CHAIR.

No. 291,952.

Patented Jan. 15, 1884.

Fig: 2.

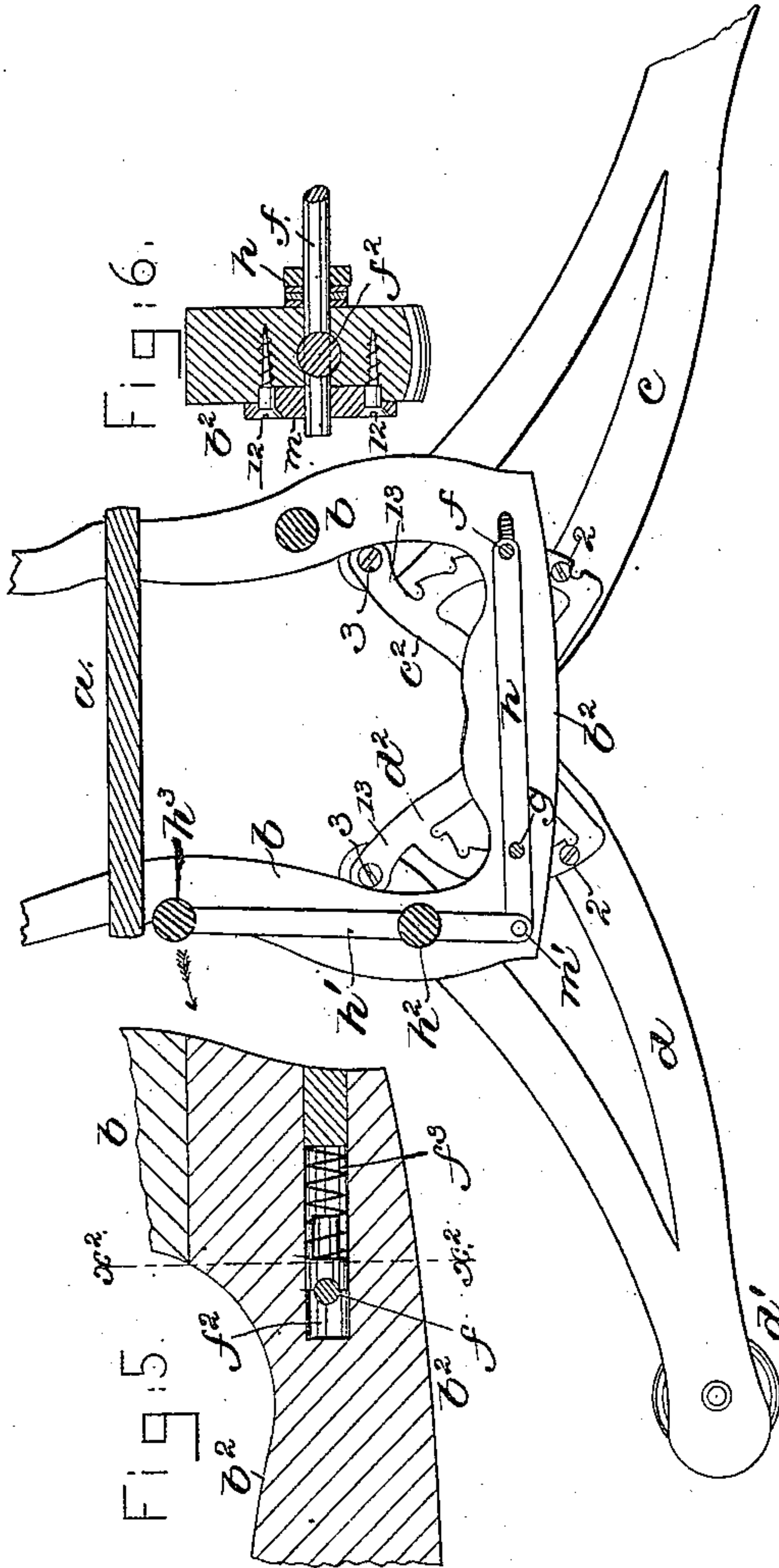


Fig: 6.

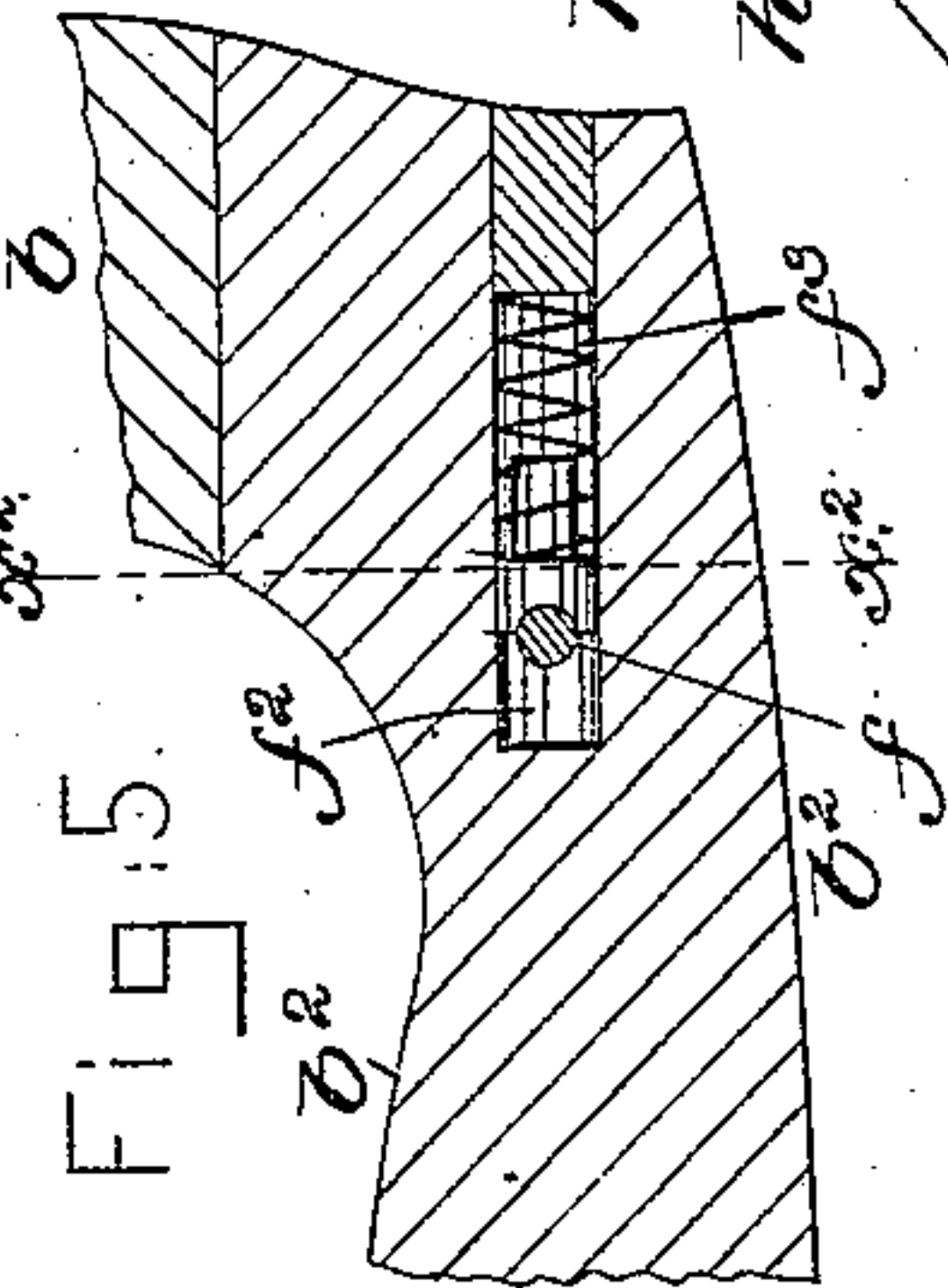
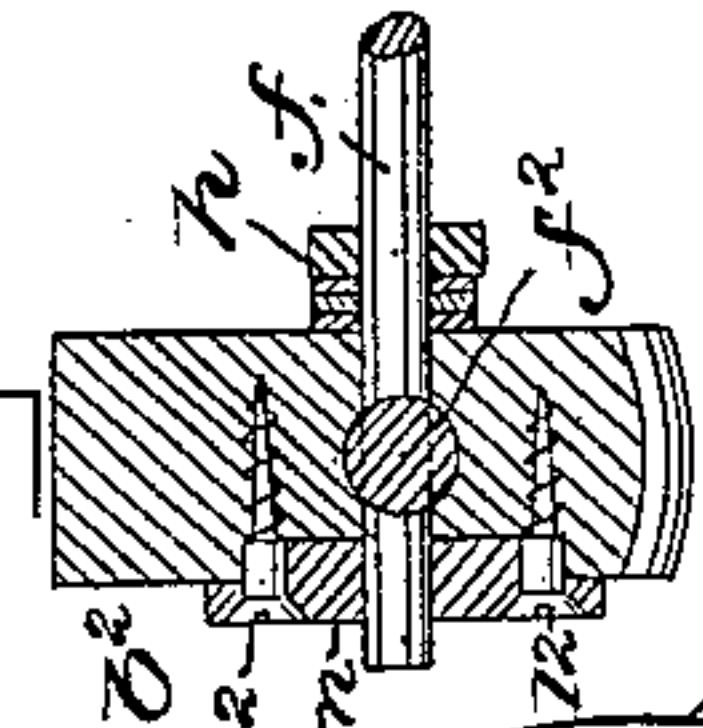


Fig: 5.

Fig: 3.

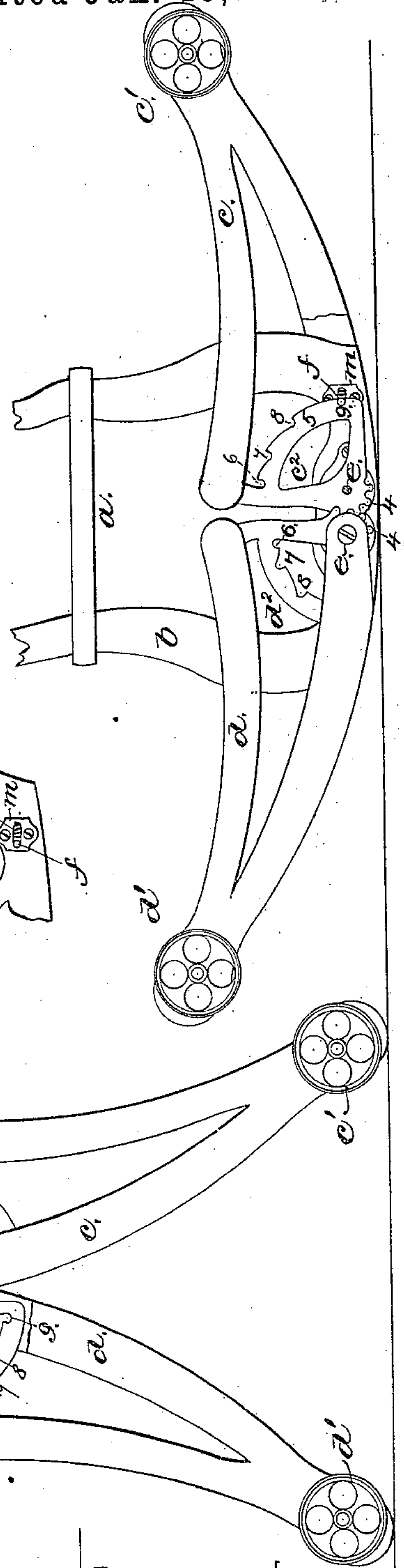


Fig: 7.

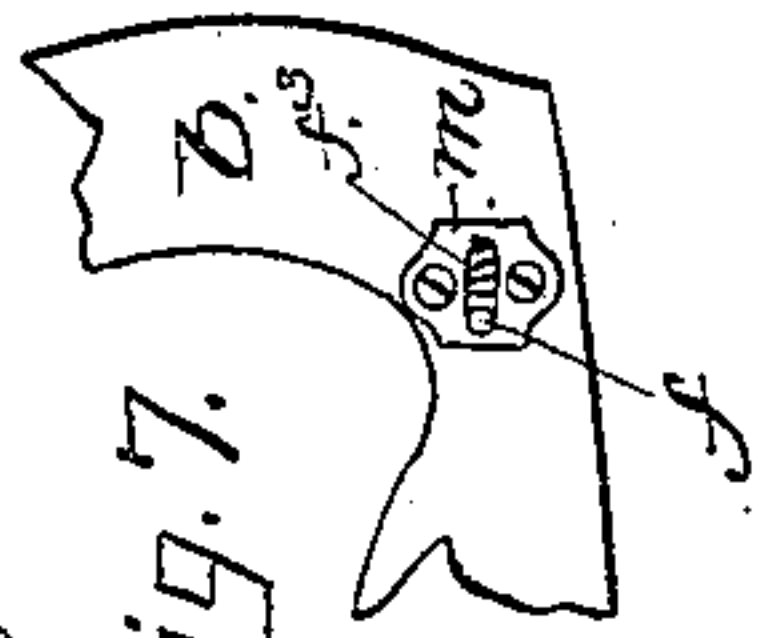


Fig: 1.

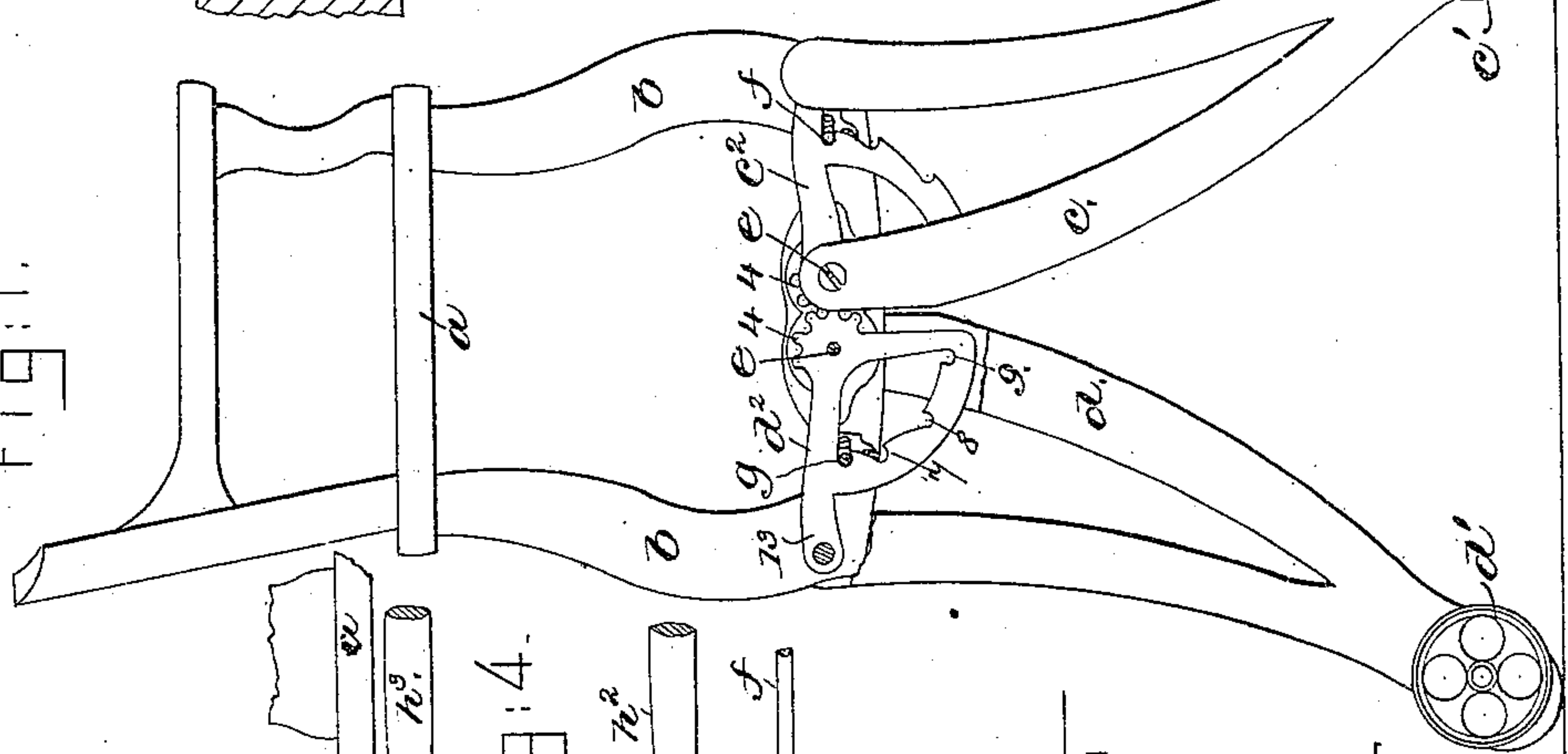
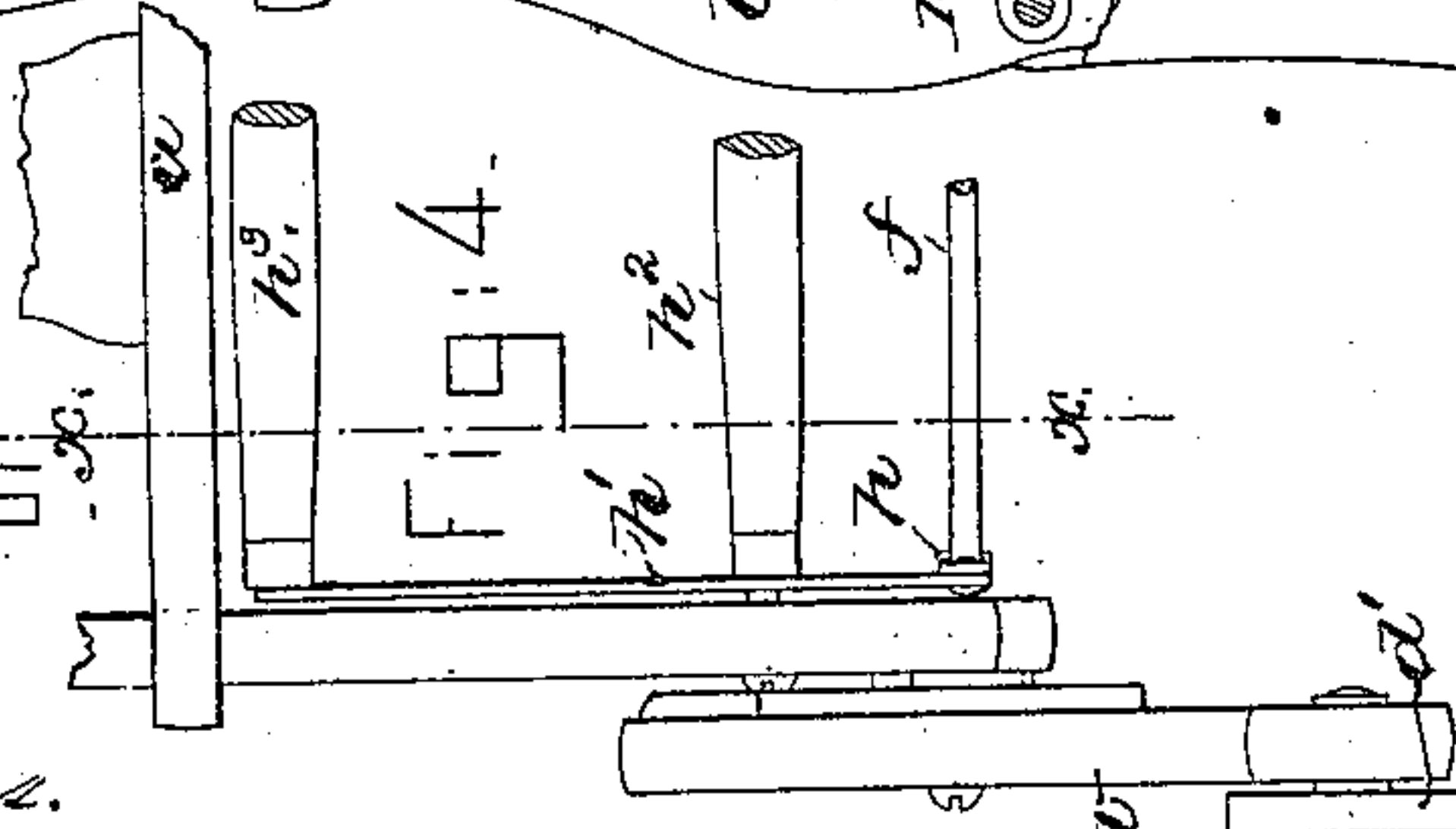


Fig: 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ASHER B. STEVENS, OF STAPLETON, NEW YORK, ASSIGNOR TO THOMPSON, PERLEY & WAITE, OF BALDWINVILLE, MASSACHUSETTS.

CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 291,952, dated January 15, 1884.

Application filed June 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, ASHER B. STEVENS, of Stapleton, county of Richmond, State of New York, have invented an Improvement in Convertible Chairs, of which the following description, in connection with the accompanying drawings, is a specification.

This invention is an improvement on United States Patent No. 179,851, to which reference may be had. In that patent the upper ends of the legs were connected by geared segments, and the legs were held in adjusted position by means of a spring-pawl carried by one leg, which engaged a ratchet connected with the under side of the seat.

In my invention the upper ends of the roller-carrying legs are connected with metal plates provided with gear-teeth to cause the said legs to turn together in unison, and also with a series of independent notches, shown as arranged in the arc of a circle, to be engaged by means of a locking device, shown as two rods, each of which is operated by the same hand-lever.

Figure 1 represents in side view a convertible chair embodying my invention, the seat being in its most elevated position, the upper end of the back leg being broken out to show the metal plate which attaches the leg to the seat-frame. Fig. 2 is a section of the line xx , Fig. 4, showing the legs in position to convert the chair into a carriage. Fig. 3 is a partial broken side elevation, showing the legs turned to convert the chair into a rocker. Fig. 4 is a partial rear side view of the chair, to show the handle and lever of the locking device. Fig. 5 is a partial longitudinal section of the side bar of the seat-frame, showing the spring which acts to operate the locking device. Fig. 6 is a section of the said side bar on the line xx , Fig. 5, it also showing in section one of the bars, which rests near the said side bar and holds the rods, the projecting ends of which co-operate with the notched segmental parts of the plates which attach the legs to the seat-frame below the seat; and Fig. 7 a detail of the side-bar with its attached guide.

The chair-seat a , supported on the rigid seat-frame b , which may be of any usual shape, has at each side of the seat-frame a pair of legs, $c d$, provided with rollers $c' d'$. The legs

are shown as forked or made in branches, for sake of lightness and appearance. Each leg, at its upper end, is connected by suitable screws, 2, with one of the quadrant-shaped metal plates $c' d'$, each of which has a series of gear-teeth, 4. The legs $c d$ are pivoted upon the frame b by screws or bolts e , extended through the upper ends of parts of each leg, the said screws or bolts being also extended through holes in the metal plates $c' d'$ at such points as will cause the gear-teeth 4 to mesh and run together as two pinions when the legs are turned about the said screws as centers. The plate c' , connected with the front leg, c , has a series of notches, 6 7 8 9, at the outside of a bar forming part of the said plate, while the plate d' , connected with the back leg, d , has its bar provided at its inner side with a like series of notches. These notches 6 6 7 7, &c., are simultaneously engaged by means of a locking device, shown as composed of two rods, $f g$, extended between two bars, h , placed one closely against the inner side of one, and the other against the inner side of the other of the two side pieces of the seat-frame b . The ends of these rods $f g$ project like pins beyond the outer sides of the bars h , and enter slots or chambers made in the lower side bars of the said frame.

Fig. 6 shows the projecting end of rod f , extended into a piston, f^2 , in one of said slots or chambers. The side bars (see Fig. 5, which shows a partial section thereof) are each provided with two suitable openings or chambers, one only being shown in Fig. 5, one of which will receive a piston, f^2 , acted upon by a spiral spring, f^3 . The projecting ends of the rod f enter holes in these pistons, as shown in Figs. 5 and 6, by the rod f , and after passing through a piston the ends of said rods are extended out through a guide-plate, m , having an elongated horizontal slot, the said plate being screwed to the outer side of the part h^2 by screws 12. The projecting ends of rod g are extended through like guide-plates, and may also, if desired, be extended through like pistons. The rear ends of the bars h , which carry the rods $f g$, are joined with a rod, m' , which has connected with it upright arms h' , pivoted at h^2 on the frame b , the said arms being unit-

ed at their upper ends by the handle h^3 , the normal position of which is just under the rear of the seat a , as in Fig. 2. The tendency of the spiral springs f^3 —one in each side bar at 5 opposite sides of the seat—acting on the pistons f^2 and opposite ends of the rods f , is to cause the bars h to be pressed toward the rear of the chair-seat, so that the ends of the said rods f g will be pushed into one or the other of the series of notches 6, 7, 8, or 9, which may be 10 in line with them, and lock the plates and legs in adjusted position. To move the bars h and rods f g from the said notches, it is only necessary to pull the handle h^3 over slightly in 5 the direction of the arrow, Fig. 2.

Figs. 1 and 3 show the legs in their extreme positions, the notches 9 and 6 being then engaged by the rods f g . Each guide m (four being used) is held in position by the screws 10 12. The bars having the series of notches 6 7, or equivalents, are curved so that the said notches fall in a circle the center of which is the screw or bolt e , and outside these bars are ears 13, with which the outermost portions of 15 the legs are attached, thus making the metal plates as light and cheap as possible.

The legs might be held in position by a locking device having but one rod f , engaging only the notches of plates c' ; but both rods 30 are best, as the chair is held more securely.

I claim—

1. In a child's chair, the seat-frame, legs c d , and attached metal plates c^2 d^2 , geared to-

gether and provided with the notched members, as shown, combined with a locking device to engage the notches 6 6 7 7 8 8 in said 35 members to hold the legs in position, substantially as described.

2. The seat-frame, pivoted legs, and connected metal plates, provided with gear-teeth 40 and holding-notches, combined with the rods f and bar m , and lever and handle to move bar m in one direction and a spring to move the said bar in the opposite direction.

3. The quadrantal metal plates c^2 d^2 , provided with gear-teeth 4 and notches 6 7 8, 45 combined with the legs c d , to which said plates are secured, and the seat-frame, to which the legs are pivoted through said plates, and means to engage the notches to hold said 50 legs as they are adjusted upon their pivots, substantially as shown and described.

4. The combination, in a child's chair, of the seat-frame, legs pivoted thereto, notched quadrantal plates geared together to connect 55 the legs to each other, and brace each individual leg, and rods or pins to enter the notches of said plates to hold the legs in position, substantially as shown and described.

In testimony whereof I have signed my name 60 to this specification in the presence of two subscribing witnesses.

ASHER B. STEVENS.

Witnesses:

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GEORGE O. FISHER.