

(No Model.)

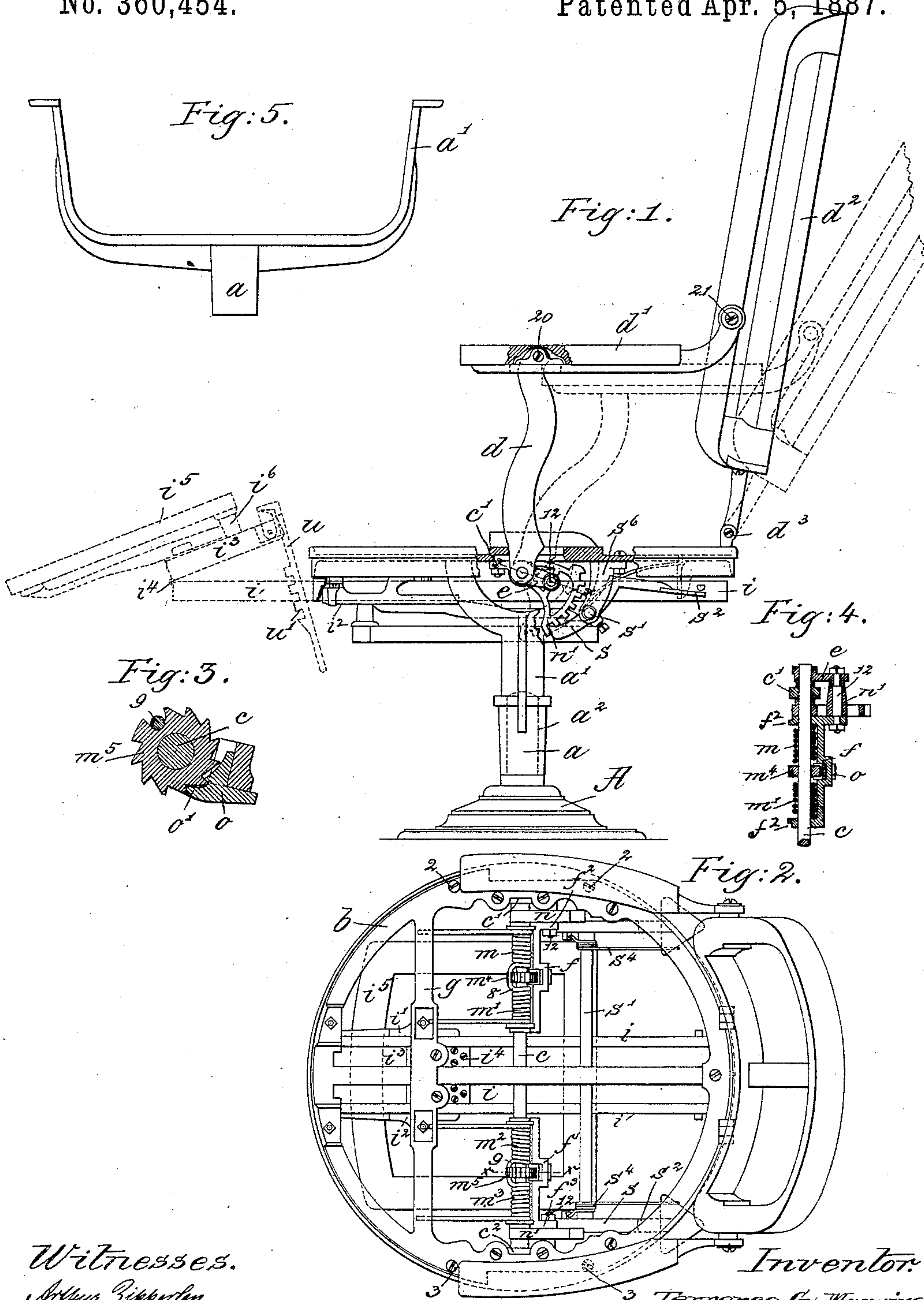
T. G. MAGUIRE, Dec'd.

M. A. MAGUIRE, Executrix.

RECLINING CHAIR.

No. 360,454.

Patented Apr. 5, 1887.



Witnesses.
Arthur Zippert.
John F. C. Prunkert.

Inventor.
Terrence G. Maguire.
by Crosby Gregory attys

UNITED STATES PATENT OFFICE.

TERRENCE G. MAGUIRE, OF BOSTON, MASSACHUSETTS; MARY ANN MAGUIRE
EXECUTRIX OF SAID MAGUIRE, DECEASED.

RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 360,454, dated April 5, 1887.

Application filed April 20, 1886. Serial No. 199,459. (No model.)

To all whom it may concern:

Be it known that I, TERRENCE G. MAGUIRE, of Boston, county of Suffolk and State of Massachusetts, have invented an Improvement in Reclining-Chairs, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention is an improvement upon Letters Patent No. 277,759, dated May 15, 1883, and No. 228,263, dated June 1, 1880, and has for its object to construct a simple and durable reclining and revolving chair, which may be easily and conveniently operated.

The invention will first be particularly described, and then set forth in the claims.

Figure 1 shows in side elevation a chair-frame embodying this invention; Fig. 2, a top view thereof; Fig. 3, a sectional detail of the tightening-ratchet, taken on the dotted line x , Fig. 2; Fig. 4, a sectional detail of one of the brackets, taken on the dotted line z , Fig. 1, and Fig. 5, a front elevation of the yoke for supporting the seat.

The base A , which in practice will be secured to the floor, has an upright or supporting-pivot, a , (see dotted lines, Fig. 1,) which is and may be of any usual or suitable dimensions. The upright or pivot a receives over it loosely a socketed or tubular portion, a^2 , forming part of a yoke, a' , supporting the seat-frame b , which is of substantially circular form, and is attached to said yoke by screws 2 2.

The seat-frame b is provided with a shaft, c , which is placed diametrically across the seat-frame b , so as to lie in a vertical plane directly above and at right angles to the supporting-pivot a , said shaft having its bearings in hangers c' c^2 , secured to the under side of the seat-frame at each side thereof.

Upon the opposite ends of the rock-shaft c are loosely mounted side pieces, d , pivoted at their upper ends, as at 20, to arms d' , the latter being jointed, as at 21, to the back d^2 , pivoted to one side of the circular frame b , as at d^3 . The side pieces, d , at their lower ends, have short arms e , preferably integral therewith.

The shaft c extends loosely through two brackets or yokes, f f' , each bracket or yoke having lugs or projections, as at f^2 f^3 .

The shaft c , between the brackets or yokes

f f' and the short arms e e' , is provided with toothed sectors n n' , and bolts 12 are passed through the lugs f^2 f^3 , the sectors n n' , and the short arms e , thereby firmly securing each bracket to its adjacent sector and to the arm e , to form one rigid piece, any movement of which upon the shaft c correspondingly moves the side piece, d , and the chair-back.

Suitable springs, consisting of right and left handed coils m m' and m^2 m^3 , are mounted upon the shaft c between the opposite ends of the brackets f f' , the ends of the said springs bearing against the under side of a cross-bar, g , extending across the circular frame, said springs serving as righting-up springs to govern the movement of the brackets, and thereby control the movement of the chair-back. Tightening-ratchets m^4 m^5 are mounted loosely upon shaft c , between the right and left handed coils of the said righting-up springs, the connecting links or loops 8 9 of the said springs engaging the said tightening-ratchets, while detachable dogs o , placed between the walls of the brackets and the ratchets, act as wedge-blocks, so that the engaging-teeth o' of the said dogs may engage the teeth of the ratchets and firmly hold the same in position.

The dogs o may be detached by turning the ratchets in one direction by a suitable wrench, and the spring may be tightened by turning the ratchets in the opposite direction, to give to the same any desired tension.

The shaft s' , extended across the frame parallel with the shaft c , and having its bearings in ears s^6 , depending from the said seat-frame, has fixed to it at or near each end an engaging-dog, s , each of the said engaging-dogs having hand-pieces s^2 , by which they may be moved to turn the shaft and disengage the dogs from the teeth of the sectors n n' , suitable springs, s^4 , mounted upon the said shaft s' , acting normally to retain the said dogs in engagement with the teeth of the sectors.

When the dogs s are disengaged from the sectors n n' , the back d^2 may be tipped to any desired angle with relation to the seat.

By placing the shaft c diametrically across the seat-frame in a vertical plane above the supporting-pivot a , as described, the arms connected therewith may be located at greater distance apart, and the main portion of the

weight and strain of the working parts is brought directly upon the supporting-pivot, to thereby so balance the weight as to permit the chair to revolve with ease and without gyration, and to take up the smallest amount of room. The foot-rest in this instance consists of a slide-bar, *i*, (see full and dotted lines, Fig. 1,) moving in guides *i'* *i''*, secured to the under side of the circular seat-frame *b*.

10 A supporting-bar, *i'*, forming a continuation of the slide-bar *i*, is hinged to the front end of the said slide-bar by suitable hinges, *i''*.

A square or rectangular shaped foot-rest, *i''*, is secured to the under side of the hinged supporting-bar *i'* by a bracket, *i'''*, so that the said foot-rest may be rotated at right angles to the length of the slide-bar. The foot-rest *i''* is turned beneath the slide-bar *i* when the foot-rest is to be pushed under the seat, the supporting-bar *i'* in this position being in line with the slide-bar *i*, as shown in full lines, Fig. 1; but when employed it is drawn outward and turned upward over upon the top of the slide-bar *i*, as shown in dotted lines, Fig. 1.

25 A latch or engaging device, *u*, is pivoted to the front end of the foot-rest, *i''*, said engaging device having several teeth, *u'*, one of which engages the side wall of a hole cut through the slide-bar *i*, through which the said engaging device passes, one or another tooth of the engaging device being employed according to the angle desired for the foot-rest.

It will thus be seen that many of the features herein described are similar to those shown and described in the patents referred to, and only such combinations as are not therein shown are herein claimed.

It is obvious that instead of employing two brackets mounted on the shaft *c*, one bracket 40 may be employed, having extended arms for connection with the side arms.

I claim—

1. A chair comprising a seat-frame, a back pivoted thereto and provided with hinged 45 arms, combined with side pieces depending from said arms and carrying arms *e*, and the

pair of brackets *f f'*, connected with the arms *e*, righting-up springs *m m' m'' m'''*, arranged in said brackets and bearing against a portion of the seat-frame, toothed sectors *n n'* and dogs 50 to engage them, and a shaft, *c*, upon which said arms *e*, brackets, springs, and sectors are arranged, and with which the springs are connected, substantially as described.

2. In a chair having a rotating seat and a 55 back pivoted thereto, the righting-up springs bearing at one end against a portion of the seat-frame, a shaft, *c*, upon which said springs are arranged, a tension device on said shaft engaging said springs, a bracket mounted upon 60 said shaft and inclosing the said springs and connected with its tension device, and a toothed sector connected to said bracket, and a dog to engage it to hold the back in position, substantially as set forth.

3. The seat-frame, the tilting back pivoted thereto, arms hinged to the back, side pieces jointed to and depending from said arms, a shaft to which the lower ends of said side pieces are pivoted, the arms *e*, fast to the side 70 pieces, righting-up springs connected to said shaft and bearing against the under side of the seat-frame, and brackets inclosing them arranged upon said shaft, bolts connecting the arms *c* and brackets, and means, substantially 75 as described, to retain the back in any desired position, substantially as described.

4. In a chair, a seat-frame, combined with a foot-rest, slide-bar, and foot-rest hinged thereto to be rotated on an axis at right an- 80 gles to the length of the slide-bar, to thereby lie either above or below it, and a locking device, substantially as described, to lock the said foot-rest at any desired angle with relation to the slide-bar, all as set forth. 85

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

TERRENCE G. MAGUIRE.

Witnesses:

B. J. NOYES,
C. M. CONE.