

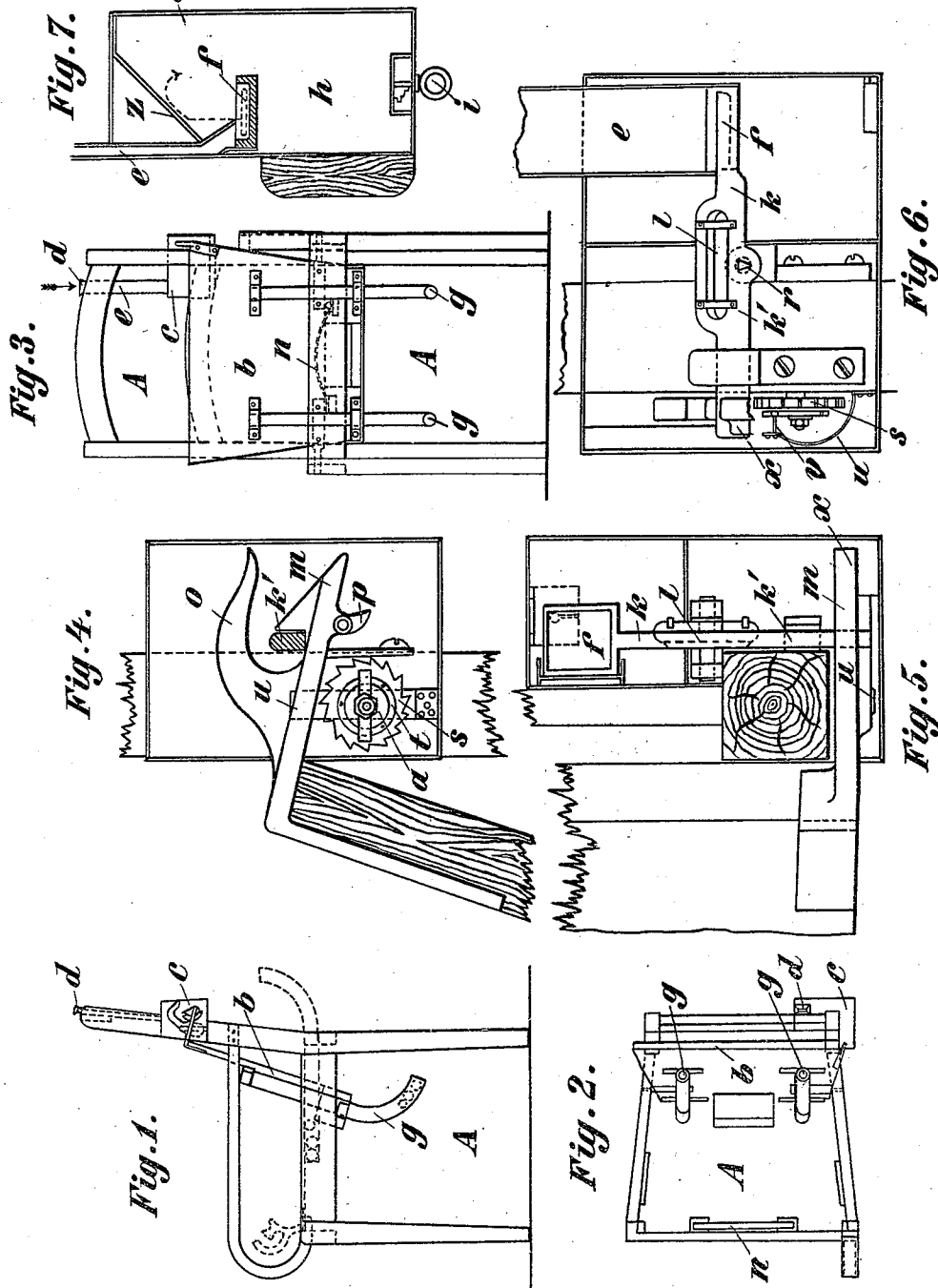
(No Model.)

G. T. WAGNER.

AUTOMATIC FOLDING CHAIR WITH COIN FREED CONTROLLING MECHANISM.

No. 554,750.

Patented Feb. 18, 1896.



Witnesses

Henry L. Maddox.
Ed. C. Holden.

Inventor

Gustav Theodor Wagner
by Arthur W. Harrison
Ass. Atty.

UNITED STATES PATENT OFFICE.

GUSTAV THEODOR WAGNER, OF BERLIN, GERMANY.

AUTOMATIC FOLDING CHAIR WITH COIN-FREED CONTROLLING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 554,750, dated February 18, 1896.

Application filed September 25, 1893. Serial No. 486,474. (No model.) Patented in England September 12, 1893, No. 17,103, and in Germany March 28, 1894, No. 74,023.

To all whom it may concern:

Be it known that I, GUSTAV THEODOR WAGNER, of Berlin, in the Kingdom of Prussia, German Empire, have invented a new and useful Coin-Controlled Folding Chair, (for which I have obtained British Letters Patent No. 17,103, dated September 12, 1893, and German Letters Patent No. 74,023, published March 28, 1894,) of which the following is a specification, reference being had therein to the accompanying drawings.

The object of the present invention is a chair that may be readily placed in position for use as required, and being capable of automatic folding immediately after its use is discontinued. In order to effect this the chair is provided with an apparatus for the reception of coins, the insertion of a suitable coin releasing the seat, which was before fastened to the back of the chair and allowing it to be brought into position for use. So soon as the seat is no longer used it returns automatically into the original position, and in doing so operates a controlling apparatus intended to show the number of times which the seat has been used.

In the accompanying drawings, Figure 1 is a side view of the chair before use. Fig. 2 is a plan view of the same. Fig. 3 is a front view. Fig. 4 is a vertical section showing the locking device. Fig. 5 is a plan view of the lever mechanism. Fig. 6 is a vertical section of the same. Fig. 7 is a vertical section showing the lower part of the coin-introducing mechanism.

A is the frame of the chair. b is the movable seat of the same.

g g are downwardly-bent hollow tubes attached to the seat and charged with heavy balls. By these means the seat b when not in use is caused to resume its position of attachment to the back of the chair.

c is a box fastened to the back part of the chair and intended for the locking and coin-feeding mechanism. If desired, the chair may be so shaped as to conceal the box.

d is the coin-feeding mouth or aperture; e, the chute down which the coin passes; f, the plate upon which the coin presses, and h the receptacle for the coins. This receptacle may be opened by the key i.

k k' is a lever moving freely and without

friction round the fulcrum r in such a way that but little weight is sufficient to press it down to the right or to the left.

l is a little tube filled with mercury intended to facilitate the displacement of the center of gravity of the lever to either side of the fulcrum.

m is a locking-hook attached to the front side of the seat-frame carrying the immovable nose o and the nose p, the latter being movable on hinges.

s is a controlling toothed wheel, which turns forward the length of one tooth by the operation of the nose p upon the falling of the hook m back into its locking position. This tooth-wheel s has on its front side a disk-shaped depression, into which is placed paper intended to receive the controlling impressions. On the controlling-leaf lies the smaller disk a removably fastened by strips of sheet metal and a nut. In this way is a circular groove t, into which penetrates the needle v, Fig. 6, fastened to the spring u. The spring u is fastened at the side and curved over the front of the tooth-wheel, and is held in tension whenever the chair is not in use by means of the stud x x, Fig. 5, applied to the longer shank of the hook m.

When the seat is bent down, the spring u loses its tension and the needle v enters the groove t and effects a visible impression upon the controlling-leaf. The number of these impressions corresponds with the number of times the chair has been used and a coin has been inserted.

The operation of the apparatus is as follows: If a coin be placed in the mouth d, it will fall through the chute e into the plate f and there remain. The plate f is thereby caused to move backward and the lever-arm k k' is raised, and the mercury in the tubes l, the latter being fastened to the lever, will retain the lever in its inclined position. The hook m is thus freed, and consequently the seat may be easily bent down. Hereupon the spring u gets out of tension and the needle v attached thereto enters the groove t and leaves a visible impression upon the controlling-leaf. When the seat b is no longer in use it is raised by the spring u, Figs. 2 and 3, and resumes its position of attachment to the back of the chair by the weight of the balls

moving inside the tubes *g g*. The controlling-wheel provided with the controlling-leaf will hereupon be moved to the extent of one tooth by the nose *p*, while at the same time
5 the stud *x x* will put the spring *u* again into its state of tension, and the nose *o* will press down the lever-arm *k'*, which had been in an upward oblique position. The mercury-tube
10 will resume its original horizontal position, and thereby the lever-arm *k'* will be brought in contact with the clutch of the hook *m*, thus causing the hook to be arrested. By the
15 pressing down of the arm *k'* the lever *k k'* is forcibly acted upon and the coin which hitherto has remained on the plate *f* of the lever-arm
k' will be thrown against the plane *Z*, Fig. 7, and from thence will drop into the collecting-box in the manner indicated by the arrow.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A chair having a pivoted seat provided with curved hollow tubes *g g* containing ball-weights, in combination with coin-controlled locking mechanism for said seat, substantially as described.

25 2. The combination with a pivoted chair-seat having a hook *m* provided with a pawl or nose *p*, of a coin-controlled lever engaging said hook, a toothed wheel adapted to be rotated step by step by the pawl and carrying
30 a disk-shaped leaf of paper, and the spring *u* carrying a needle *v* and adapted to be operated by the movements of the hook *m*, substantially as described.

In witness whereof I have hereunto set my
hand in presence of two witnesses.

GUSTAV THEODOR WAGNER.

Witnesses:

PAUL FISCHER,
HANS ZAUE RHIN.