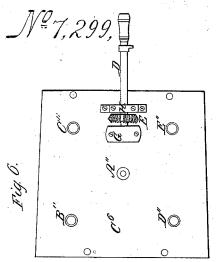
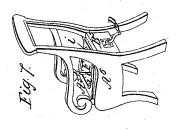
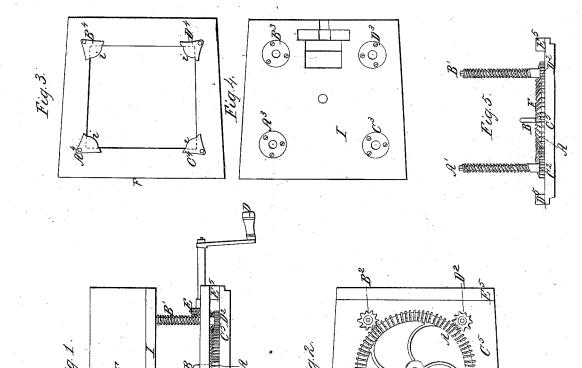
## A.M.Asuy, Dentists' Chair,



Patented Apr. 23, 1850.





## UNITED STATES PATENT OFFICE.

A. M. ASAY, OF PHILADELPHIA, PENNSYLVANIA.

## DENTIST'S CHAIR.

Specification of Letters Patent No. 7,299, dated April 23, 1850.

To all whom it may concern:

Be it known that I, ABRAHAM MERRITT ASAY, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and Improved Method of Elevating the Seat of a Dentist's or other Chair; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in constructing a deep bottom or seat to a common arm chair, consisting of an external box, Figure 1, in which is the following machinery, to wit; a wheel cogged on the upper surface and periphery Fig. 1, working 15 on an axle B Fig. 1, affixed to the bed or under part of the box C, C, Fig. 1 more fully represented in Fig. 2, which is an upper view of the same wheel of which a side view is only given in Fig. 1. Said

wheel is used to turn 2, 3, or 4 male screws (at the pleasure of the maker, but the drawings are made with 4 screws, it being believed that that number acts more steadily and with less friction) which screws A<sup>1</sup>, and

B¹, Fig. 5, are furnished with smaller cog wheels, A², B², C², and D² Fig. 2, at the lower end, working into the cogs of the above mentioned larger wheel A, Fig. 1, and into 2, 3 or 4 female screws A³, B³, C³, and

10 D<sup>3</sup>, Fig. 4 and running up into pipes A<sup>4</sup>, B<sup>4</sup>, C<sup>4</sup>, and D<sup>4</sup>, Fig. 3 in the seat or inner box F Fig. 1, intended to be elevated, the whole of which is moved by a winch D Fig. 1, on which is a cogged wheel, E Fig. 1, working 35 into the cogs on the upper side of the larger

wheel A Fig. 1, and upon the winch D Fig. 1, being turned toward the left side of the chair, the seat rises, according to the length of the screws, from 7 to 12 or even 20 inches.

To enable others skilled in the art to make and use my invention I will proceed to describe more particularly, the machinery used in the elevation of the seat and its operation.

The chair is constructed in the usual way, except that the front, side, and back pieces A<sup>5</sup> and B<sup>5</sup> Fig. 7 must be 8 inches or more in width, according to the length of the screws A<sup>1</sup> and B<sup>1</sup> Fig. 5; at the bottom of these pieces is secured a strong bed piece of inch board C<sup>5</sup>, Fig. 5 extending under the

box, which has let into it 5 iron or brass sockets, in their respective places, to receive the lower end of the axle of the large cog 55 wheel A Fig. 1, and those of the smaller cog wheels A<sup>2</sup>, B<sup>2</sup>, C<sup>2</sup>, and D<sup>2</sup>, Fig. 2; which axles being prolonged upward, work, say B Fig. 1 in a collar or socket of brass or iron A''', Fig. 6, inserted in the center of an-60 other piece of board C<sup>6</sup> Fig. 6, and the other axles being prolonged into screws A' B' Fig. 5, pass through similar collars or sockets B", C", D", E" Fig. 6 so as to work in the female screws A<sup>3</sup>, B<sup>3</sup>, C<sup>3</sup>, D<sup>3</sup>, Fig. 4 or nuts 65 which are affixed as will be seen on reference to the drawings accompanying this specification, to the bottom I of the seat Fig. 4 or inner box F and passing through said screws or nuts A<sup>3</sup>, B<sup>3</sup>, C<sup>3</sup>, D<sup>3</sup> Fig. 4 into 70 pipes *i i* Figs. 3 and 7 on the inside of the seat, the tops or covers of which pipes are seen at A4, B4, C4, and D4 Fig. 3, which Fig. 3 exhibits an upper view of the inner box, which will have on it the usual stuffed 75 cushion to form the seat. Fig. 6 representing a strong board into which the above mentioned sockets A'" B", C", D", E" are inserted and which also has in it an aperture or opening through which works the 80 upper cog wheel E Fig. 1 whose axle is confined on the upper side of Fig. 6 by means of 2 collars or boxes G and H Fig. 6 and being prolonged back forms a part of the winch D Fig. 1. Fig. 6 is let down on to two 85 projections D<sup>5</sup> and E<sup>5</sup> Fig. 5 to which it is

also confined by wood screws.

The larger cog wheel A Fig. 1 as aforementioned is cogged on its upper side and circumference the upper side F Fig. 5 be- 90 ing beveled, and the circumference A Fig. 5 being perpendicular and into which work the cog wheels of the male screws. On the beveled or upper edge F Fig. 5 of the cog wheel A Fig. 2 works the cog wheel E Fig. 1 95 connected as already mentioned with the winch D Fig. 1 which puts the whole in

motion as already stated.

Having described the nature of my invention and improvement what I claim and desire to have secured to me by Letters Patent

inch board C<sup>5</sup>, Fig. 5 extending under the The manner in which I arrange the operwhole of the seat and forming the external ating parts within the frame work and un-

der the seat in combination with the seat so made as to move up and down within the frame work and appear like an entire seat as herein set forth.

In testimony thereof I, ABRAHAM MER-RITT ASAY, do to these presents, in the presence of the underwritten attesting witnesses, affix my signature this thirty-first day of

January in the year of our Lord, one thousand eight hundred and forty nine (1849). 10

A. MERRITT ASAY. [L. s.]

Signed in presence of us as attesting witnesses:

ELIJAH M. NEALL, Ed. Sprague.