Sept. 29, 1925. 1,555,468

W. F. HALL

ELECTROPLATING MACHINE

Filed Oct. 11. 1924 3 Sheets-Sheet 1

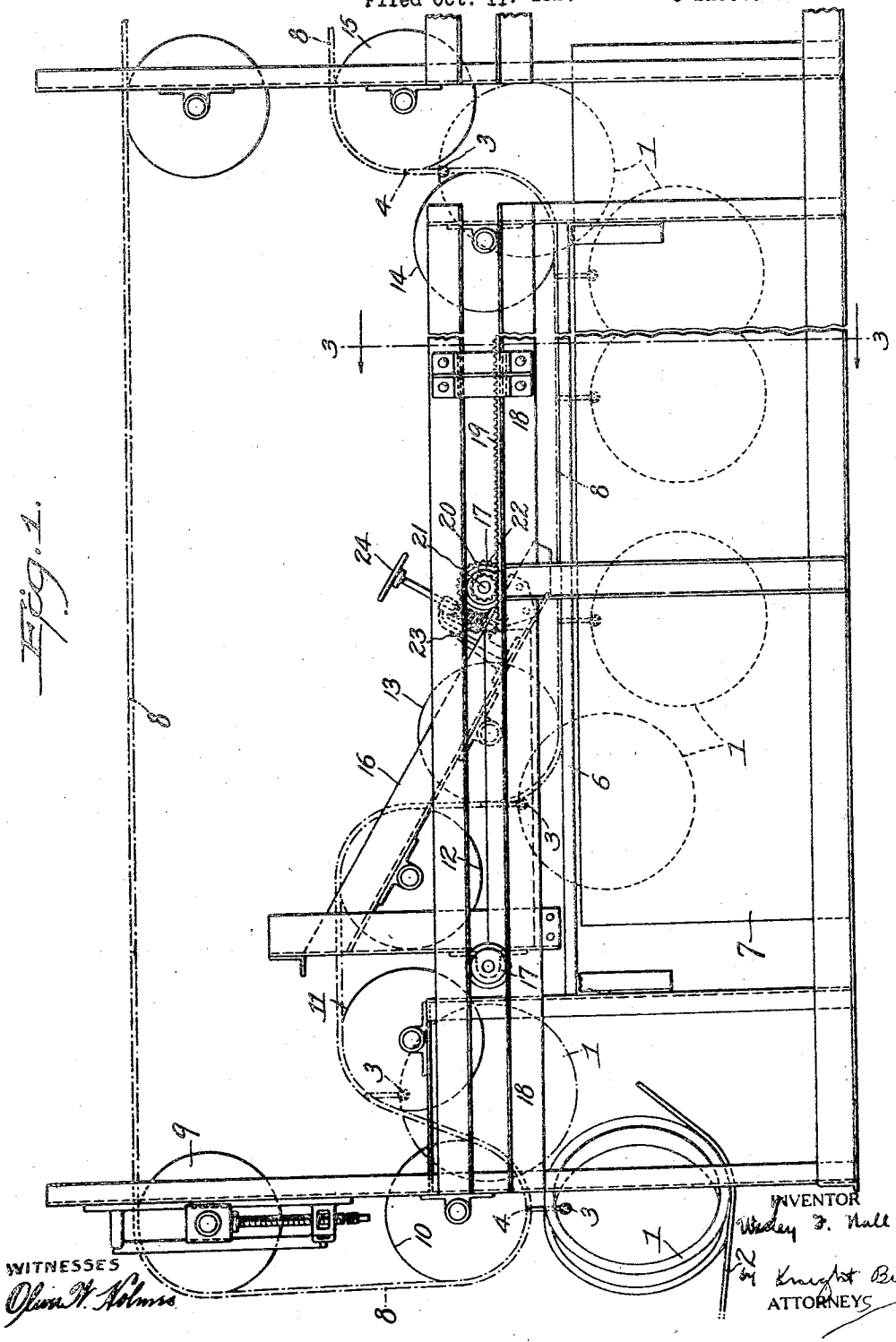


Fig. 1.

WITNESSES

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INVENTOR

Wesley F. Hall

by Knight Bros

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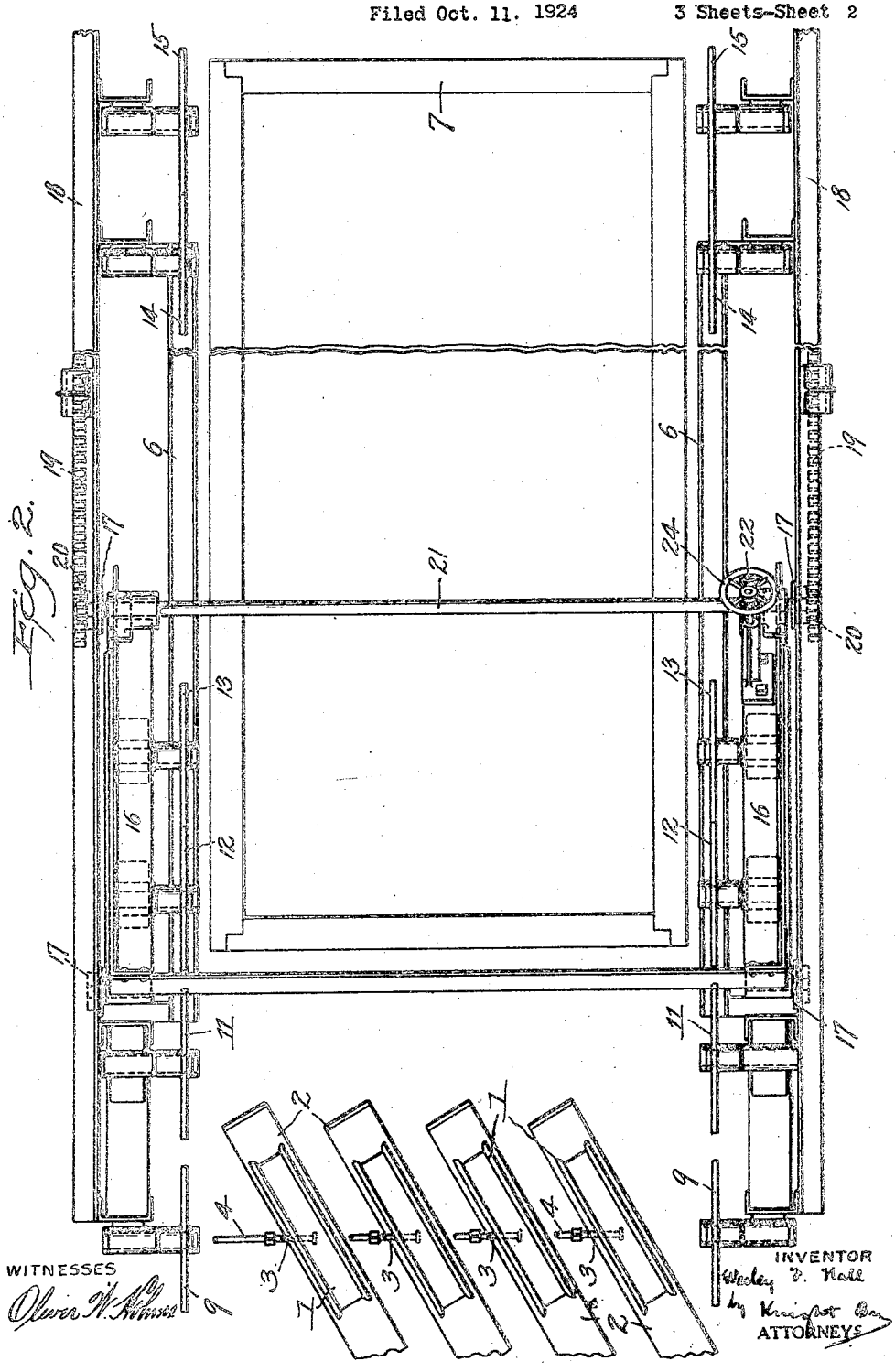
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Fig. 2.



WITNESSES

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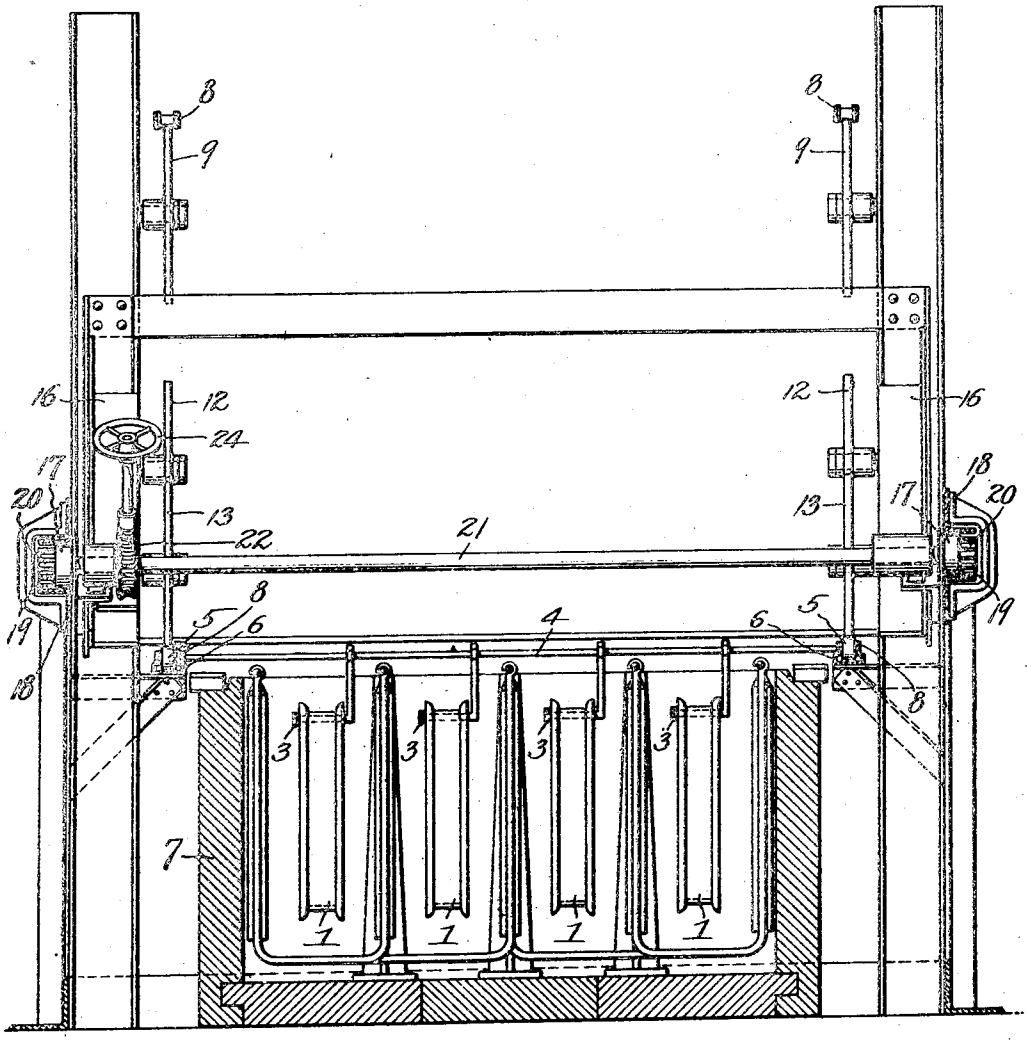
Sept. 29, 1925. 1,555,463

W. F. HALL

ELECTROPLATING MACHINE

Filed Oct. 11. 1924 3 Sheets-Sheet 3

Fig. 3.



WITNESSES

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Patented Sept. 29, 1925. 1,555,468

UNITED STATES PATENT OFFICE.

WESLEY F. HALL, OF MATAWAN, NEW JERSEY, ASSIGNOR TO THE HANSON & VAN WINKLE COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

ELECTROPLATING MACHINE.

Application filed October 11, 1924. Serial No. 743,148.

To all whom it may concern:

Be it known that I, WESLEY F. HALL, a citizen of the United States, residing in Matawan, county of Monmouth, and State of New Jersey, have invented certain new and useful Improvements in Electroplating Machines, of which the following is a specification.

This invention relates to electroplating machines in which objects to be electroplated are carried through successive baths of liquid. It is sometimes desirable to vary the time that the objects remain in the bath and especially with respect to the time they remain in one bath as compared with the time they remain in a successive bath all operated by the same chain of conveyers.

The present invention attains this object by means of an adjustable carriage for that part of the machinery which immerses the objects in the bath or removes them therefrom.

The invention will be more particularly described in connection with the accompanying drawings in which—

Figure 1 represents a side elevation of an electroplating machine showing that part to which my invention is applied;

Figure 2 is a plan view of the same; and

Figure 3 is a transverse vertical section on the line 3—3 of Figure 1.

The machine illustrated is particularly adapted to the electroplating of automobile tire rims. In such machines the rims 1 are rolled down inclines 2 until they come to a point where they will engage with hooks 3 which depend from cross-bars 4. These bars have a roller 5 at each end travelling in channel tracks 6 when the rims are immersed in the bath contained in the vat 7. The rollers 5 form parts of endless chains 8 which passing first over a tension ring 9 and then over idlers 10, 11, 12, 13, 14 and 15 carry the hook 3 first into engagement with the rims 1 outside of the vat and then lift the rims up over and then down into the vat by means of idlers 11, 12 and 13, the rims being finally lifted out of the vat by means of idlers 14 and 15. The idlers 12 and 13 have their journals mounted on a frame-work 16 carried by wheels 17 on the horizontal members of the stationary frame 18. The frame 16 with its wheels forms therefor a carriage which when moved along the horizontal members of the stationary frame 18 shortens or lengthens the path of the articles in the liquid and therefore the time of immersion. To move the carriage along the track any suitable means may be employed. I have shown for this purpose a rack 19 secured to the stationary frame 18 and having enmeshed therewith a gear wheel 20 keyed to one of the axles 21 of the carriage. Likewise keyed to the same axle is a worm wheel 22 and a screw 23 engages with the same and has on its shaft a handle 24. When therefore the handle 24 is turned by the operator, the chain propels the carriage 16 along the stationary frame 18 until a proper adjustment is made. The screw 23 and worm wheel 22 form a locking device that will hold the carriage fixed in its desired position. The chain 8 is driven by any suitable motor power and it is to be understood of course, that the electroplating apparatus shown in the drawing may be used by itself or in connection with other apparatus of like nature or connected in series with it.

I claim:

1. In an electroplating machine comprising an electroplating vat, means for carrying articles down into the vat along the vat and then lifting them out of the vat with means for varying the distance of their travel longitudinally in the vat.

2. In an electroplating machine the combination comprising a vat, a stationary frame parallel therewith, a movable frame adapted to travel along the stationary frame, idlers journalled on the stationary frame and movable frame and an article carrier passing over the idlers and adapted to carry articles to be plated into, along and out of the vat, the immersion distance being regulated by the adjustment of the movable frame with relation to the stationary frame.

3. In an electroplating machine the combination of a vat, a stationary frame parallel therewith, a movable frame having carrier wheels adapted to travel on the stationary frame, idlers on the movable frame and stationary frame, an article carrier passing over the idlers to lower articles into the vat and then carry them along the vat in the liquid contained therein and then elevate them out of the vat and means for moving the movable frame along the stationary frame and holding it locked in any desired position.

WESLEY F. HALL.