G. A. DOBYNE.

LEATHER ROLLING MACHINE.

APPLICATION FILED NOV. 21, 1910.

1,067,164. Patented July 8, 1913.

3 SHEETS—SHEET 1.

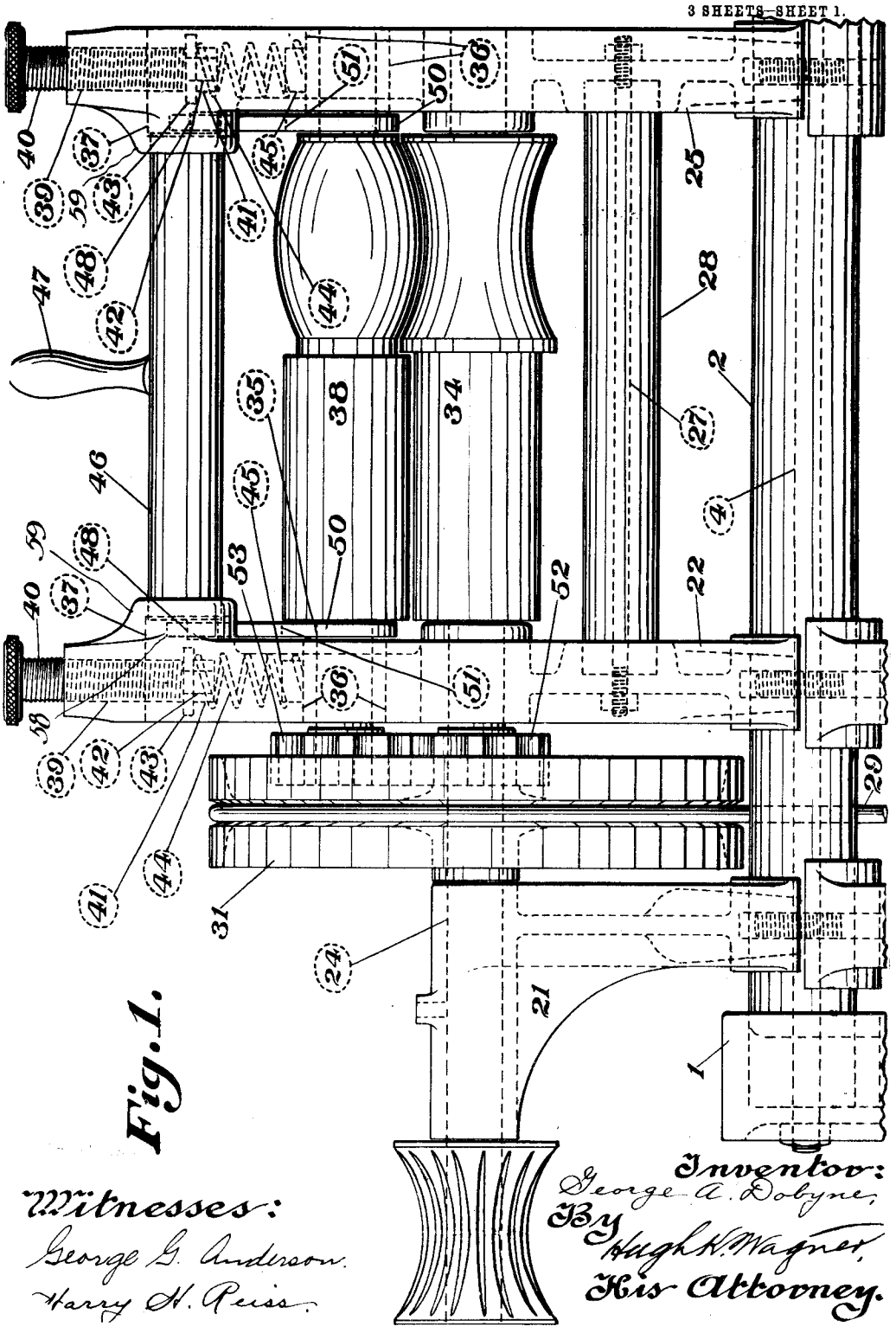


Fig. 1.

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Harry H. Peiss.

Inventor:
George A. Dobyne,
By Hugh K. Wagner,
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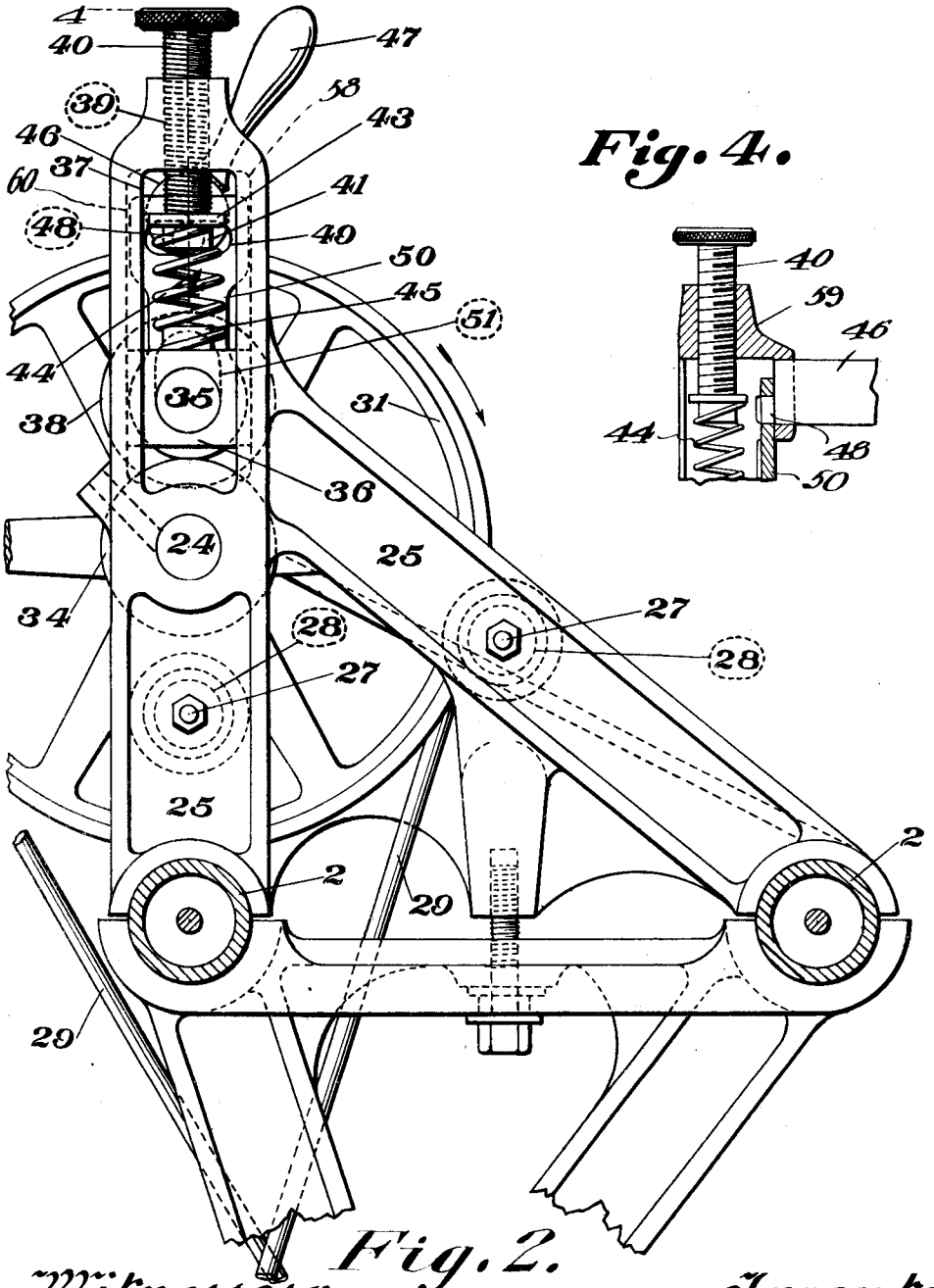


Fig. 2.

Fig. 4.

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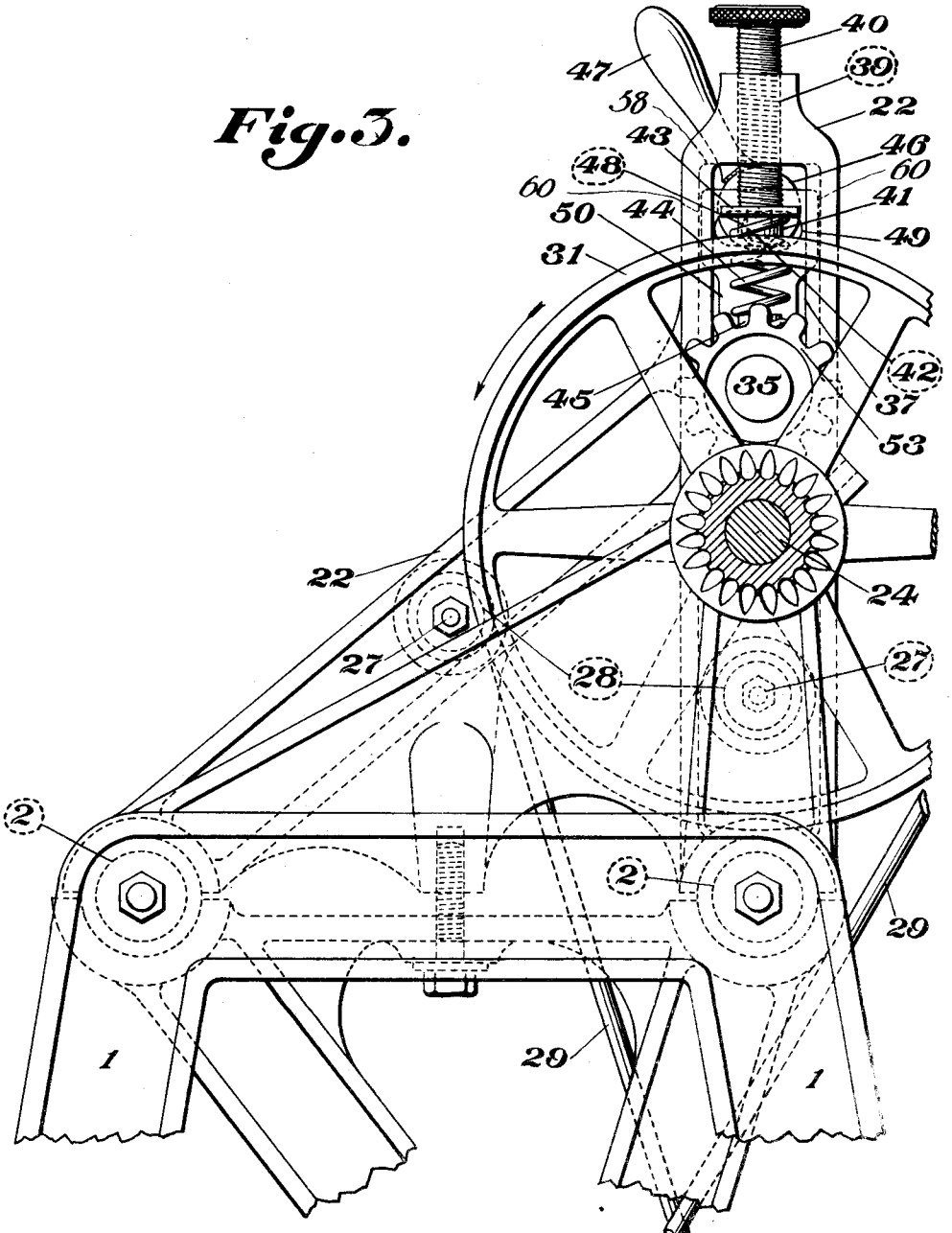
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3 SHEETS—SHEET 3.

Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE A. DOBYNE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO CHAMPION SHOE MACHINERY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

LEATHER-ROLLING MACHINE.

1,067,164. Specification of Letters Patent. Patented July 8, 1913.

Application filed November 21, 1910. Serial No. 593,356.

To all whom it may concern:

Be it known that I, GEORGE A. DOBYNE, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Leather-Rolling Machines, of which the following is a specification.

This invention relates to machines for rolling leather, and its objects are to provide a machine which will be simple in construction and operation.

Further objects will appear from the detail description taken in connection with the accompanying drawings in which:

Figure 1 is a front elevation of a machine embodying this invention, Fig. 2 is a right hand elevation, Fig. 3 is a left hand elevation, and Fig. 4 is a section on the line 4—4 Fig. 2.

Referring to the accompanying drawings, 1 designates one of a plurality of standards, and 2 the rails which form the frame of the machine. A pair of castings 22 and 25 are mounted upon and clamped to the rails 2 and form the side frames of the machine. A shaft 24 is mounted in bearings in the side frames. Tie-rods 27 connect casting 22 with casting 25 and extend through pipes 28, or the like, that space said castings 22 and 25 apart. A belt 29 drives pulley 31 on shaft 24.

Shaft 24 bears a roller 34 that is located between castings 22 and 25, part of said roller being cylindrical and another part being concave. A shaft 35 is journaled in openings in a pair of blocks 36 and is located above shaft 24. Said blocks 36 are slidably mounted in slots 37 in castings 22 and 25, respectively, said slots being preferably arranged vertically in said castings. Shaft 35 bears a roller 38 that is located between castings 22 and 25 and above roller 34, part of said roller 38 being cylindrical and another part being convex in order to rest normally upon the cylindrical and concave parts, respectively, of roller 34. Castings 22 and 25 are provided with screw-threaded openings 39 to receive thumb screws 40. Each thumb-screw 40 bears a collar 41, which is loosely mounted on a reduced end 42 of said screw, said collar bearing a flange 43 that holds one end of a spring 44 in place. Said spring is arranged to exert its pressure upon a block 36 and thereby tends to hold roller 38 in engagement with roller 34, a projection 45, or the like, on said block being arranged to hold the other end of said spring in place. By means of the thumb-screws 40, the pressure of springs 44 can be regulated so as to increase or diminish the pressure of roller 38 upon roller 34. A rod or shaft 46 is journaled in bearings formed in bosses 59 on castings 22 and 25 preferably above roller 38, a handle 47 being attached to said rod in order to afford a means for rotating same. Each end of rod 46 is provided with an eccentric pin 48, which projects into a slot 49 in the enlarged head of a link or plate 50, said slot being preferably arranged to extend substantially horizontal. Said plate 50 is dependent from pin 48, and contains a slot 51 through which shaft 35 extends, said slot 51 being disposed substantially vertical. The bosses 59 are recessed vertically as shown at 58 in Figs. 1, 2 and 4 to form side walls 60. The links or plates 50 are guided and sustained at their lower ends by and between the ends of the rolls 38 and the inside faces of the castings 22 and 25, and at their upper ends by the bosses 59 and the side walls 60 thereof. Pins 48 normally underlie the horizontal axis of rod 46 and thereby allow roller 38 to rest upon roller 34, but, when rod 46 is rotated in either direction through approximately one half of a revolution, said pins force plates 50 upwardly and thereby raise roller 38 out of engagement with roller 34 in order to allow a piece of leather to be placed between said rollers. Shaft 24 bears a gear 52, which drives gear 53 borne by shaft 35, the teeth of both gears being relatively long in order to allow rollers 34 and 38 to be separated, as hereinabove described, without entirely separating said gears.

Rollers 34 and 38 rotate with shafts 24 and 35 and, when a piece of leather is placed between said rollers, as hereinabove described, same feed the leather from the front to the back of the machine, *i. e.*, from right to left, Fig. 3. The leather is rolled either between the cylindrical parts of rollers 34 and 38 or between the concave and convex parts of said rollers and, as springs 44 press roller 38 toward roller 34, the leather is made more flexible by the rolling, the con-

cave and convex parts of said rollers affording means for pressing the leather either into a concave or a convex form.

I claim:

1. In a leather rolling machine, the combination with a pair of side members, of a pair of rolls mounted in said side members, one of said rolls being slidable in said side members toward and from the other roll, a rock shaft mounted in said side members and having eccentrics on the ends thereof, and links connecting said eccentrics with said slidable roll, constructed to cause said rock shaft to separate said rolls.

2. In a leather rolling machine, the combination with a pair of side members, of a pair of rolls mounted in said side members, one of said rolls being slidable in said side members toward and from the other roll, a rock shaft mounted in said side members and having eccentrics on the ends thereof, and means guided on said side members connecting said eccentrics and said slidable roll, constructed to cause said rock shaft to separate said rolls.

3. In a leather rolling machine, the combination with a pair of side members, of a pair of rolls mounted in said side members, one of said rolls being slidable in said side members toward and from the other roll, a rock shaft mounted in said side members and having eccentrics on the ends thereof, and plates slidably mounted on said side members and connected at one of their ends to said slidable roll and having in their other ends transverse slots to engage said eccentrics, constructed to cause said rock shaft to separate said rolls.

4. In a leather rolling machine, the combination with a pair of side members, of a pair of rolls mounted in said side members, one of said rolls being slidable in said side members toward and from the other roll, said side members having bosses projecting therefrom, a rock shaft mounted in said bosses and having eccentrics on the ends thereof, and links connecting said eccentrics with said slidable roll, constructed to cause said rock shaft to separate said rolls.

5. In a leather rolling machine, the combination with a pair of side members, of a pair of rolls mounted in said side members, one of said rolls being slidable in said side members toward and from the other roll, said side members having bosses projecting therefrom, a rock shaft mounted in said bosses and having eccentrics on the ends thereof, and plates guided on said side members and by said bosses and connecting said eccentric and said slidable roll, constructed to cause said rock shaft to separate said rolls.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

GEORGE A. DOBYNE.

Witnesses:

GLADYS WALTON,

GEORGE G. ANDERSON.