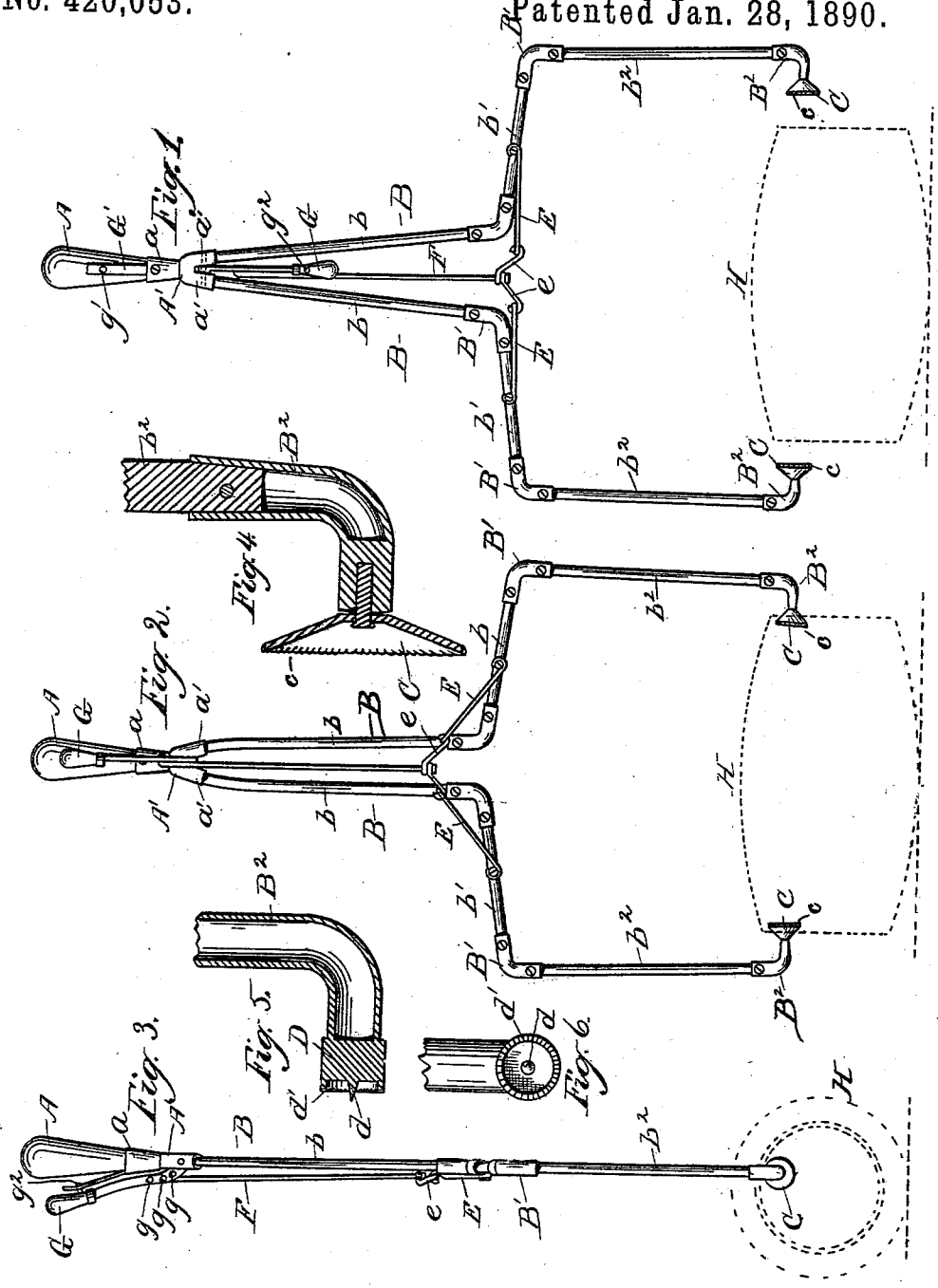
(No Model.)

J. GOODRICH.

BARREL ROLLER.

No. 420,053. Patented Jan. 28, 1890.



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JOSEPH GOODRICH, OF CHICAGO, ILLINOIS.

BARREL-ROLLER.

SPECIFICATION forming part of Letters Patent No. 420,053, dated January 28, 1890.

Application filed March 31, 1888. Serial No. 269,163. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH GOODRICH, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Barrel-Rollers, which is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a barrel-roller embodying my invention, the same being shown open; Fig. 2, a similar view showing the barrel-roller closed and in operative position; Fig. 3, a side elevation of the same; Fig. 4, an enlarged detail sectional view of Fig. 3; Fig. 5, a similar view showing a modified form, and Fig. 6 an end view of the construction shown in Fig. 5.

Like letters refer to like parts in all the figures of the drawings.

My invention relates to barrel-rollers, and has for its object to produce a device of this description which shall be simple and cheap in construction and effective in operation; and to these ends it consists in certain novel features which I shall now proceed to describe, and will then particularly point out in the claims.

In the drawings, A represents a suitable handle, to which are connected two spring-arms B. These arms may be constructed of any suitable material having suitable elasticity for the purpose. In practice, these arms are constructed chiefly of wood, the various sections being connected by metallic ferrules. In the construction shown these arms are connected to the handle A by means of a ferrule A′, having a socket *a* to receive the said handle and sockets *a′* to receive the ends of the arms B. Each arm B consists of a section *b*, extending outward from the ferrule A′, a section *b′*, arranged almost at right angles thereto, and a section b^2, arranged almost at right angles to the section *b′*. These sections are connected by bent metallic ferrules B′. The ends of the sections b^2 are provided with metallic end pieces B^2, bent toward each other and provided with suitable grasping-jaws. In Figs. 1, 2, 3, and 4 of the drawings I have shown these grasping-jaws as consisting of disks C, mounted to revolve on the ends of the end pieces B^2, and having preferably a roughened or serrated periphery *c*. As a substitute for this form I may employ the form shown in Figs. 5 and 6, in which each end piece B^2 is provided with a cylindrical head D, having a projecting central pin *d*, surrounded by a serrated annular rim *d′*.

The elasticity of the arms B tends to separate them and hold them normally in the position shown in Fig. 1 of the drawings. In order to bring the arms toward each other I have devised the following mechanism: Connecting-rods E are pivoted to the sections *b′* of the arms B, and are connected by means of links *e* to the lower end of an operating-rod F. The upper end of said rod is connected to a lever G, which is pivoted to the ferrule A′, between the sockets *a′* thereof. This connection is an adjustable one, the lever being provided with a series of apertures *g*, into any one of which the hooked upper end of the operating-rod F may be inserted.

G′ indicates a spring, one end of which is secured to the ferrule A′ or to the handle A, the other end being free and being provided with an aperture *g′*. The lever G is provided with a pin g^2, which, when the lever is brought into the position shown in Figs. 2 and 3 of the drawings, enters the aperture *g* in the spring G′, in which position the said spring serves as a lock for the lever.

The operation of the device is as follows: The barrel to be moved is represented in dotted lines at H in the several figures of the drawings. The parts of the device being in the position shown in Fig. 1, with the arms B separated by their elasticity, the device is brought into position with the grasping-jaws C opposite the heads of the barrel. The lever G is then brought upward toward the handle A into the position shown in Figs. 2 and 3, in which position it is locked by means of the spring G′. It will be observed that the grasping-jaws C then bear upon the heads of the barrel at each end thereof immediately under the chines thereof, the edge of the disk C bearing against the inner surface of the chines. The serration or roughening of the edge of said disks prevents slipping of the grasping-jaws. When the device is thus ap-

plied to a barrel it is obvious that it may be rolled along upon its bilge, being either pushed or pulled, as may be desired.

The device may be adapted to barrels of different sizes by properly adjusting the connection between the operating-rod F and lever G. The spring G′ serves to lock the lever G, for the reason that any pull upon said lever due to the elasticity of the arms B will cause the pin g^2 to bind tightly against the margin of the aperture g' in said spring. The lever may be released by depressing the free end of the spring G′, when the arm B will spring outward and be freed from the barrel.

When the form of grasping-jaws shown in Figs. 5 and 6 is employed, the device must be so placed relatively to the barrel as to bring the said grasping-jaws opposite the center of the barrel-heads. When the parts are in this position, and the grasping-jaws are brought into contact with the barrel, the pins d will enter the wood and the serrated annular rims d' will cut into the wood sufficiently to form a small annular groove therein, which, in conjunction with the pins d, will prevent any slipping of the grasping-jaws, and will permit the barrel to be easily rolled or even lifted.

It is obvious that various modifications in the details of construction and arrangement of parts may be made without departing from the principle of my invention, and I therefore do not wish to be understood as limiting myself strictly to the precise details hereinbefore described, and shown in the drawings.

I am aware that barrel-rollers of various kinds provided with hinged or pivoted arms to grasp the barrel, either by its heads or chines after the manner of a pair of tongs, are old and well known, and I therefore do not wish to be understood as claiming such a construction, broadly, my invention consisting more particularly in the use of spring-arms whose elasticity normally forces them apart, so that they are always in position to grasp the barrel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a barrel-roller, the combination, with a suitable handle, of spring-arms connected thereto, normally separated by their elasticity, and provided with suitable grasping-jaws, an operating-rod connected to said arms by suitable links and rods, and a lever to which said operating-rod is connected, substantially as and for the purposes specified.

2. In a barrel-roller, the combination, with the spring-arms normally separated by their elasticity, of the operating-rod suitably connected thereto, and an operating-lever to which the operating-rod is adjustably connected, substantially as and for the purposes specified.

3. In a barrel-roller, the combination, with the spring-arms provided with suitable grasping-jaws, of the operating-lever suitably connected to said spring-arms, and a locking device for securing said operating-lever, substantially as and for the purposes specified.

4. In a barrel-roller, the combination, with the handle A and spring-arms B, normally separated by their elasticity, of the connecting rods E, links e, operating-rod F, and operating-lever G, substantially as and for the purposes specified.

5. The combination, with the lever G, having pin g^2, of the locking-spring G′, having aperture g' to receive said pin, substantially as and for the purposes specified.

JOSEPH GOODRICH.

Witnesses:
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