N. L. RIGBY.

SUPPORT FOR NOZZLES OF FOUNTAIN SYRINGES.

APPLICATION FILED JULY 30, 1906.

960,404. Patented June 7, 1910.

Fig. 1.

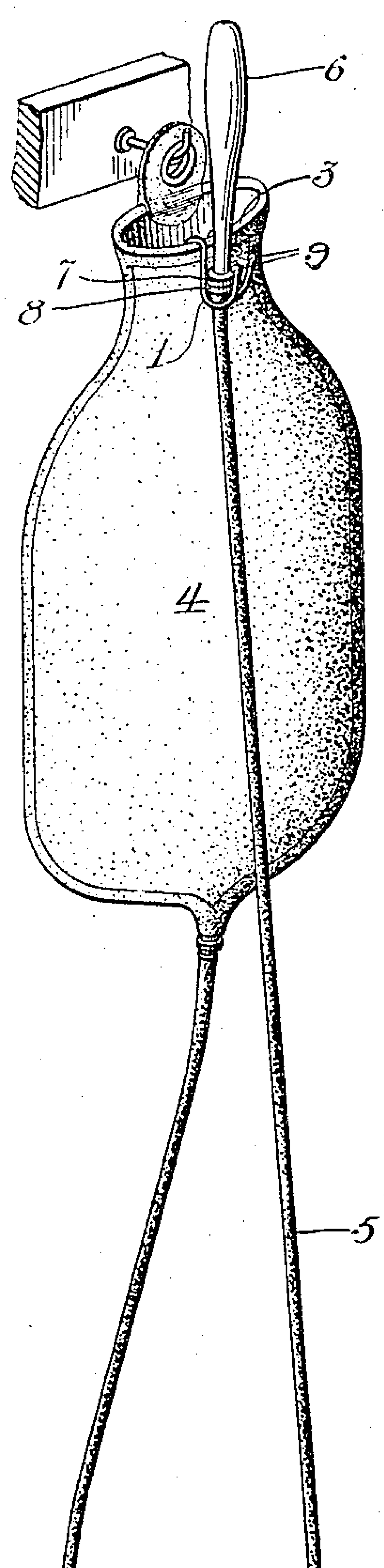


Fig. 2.

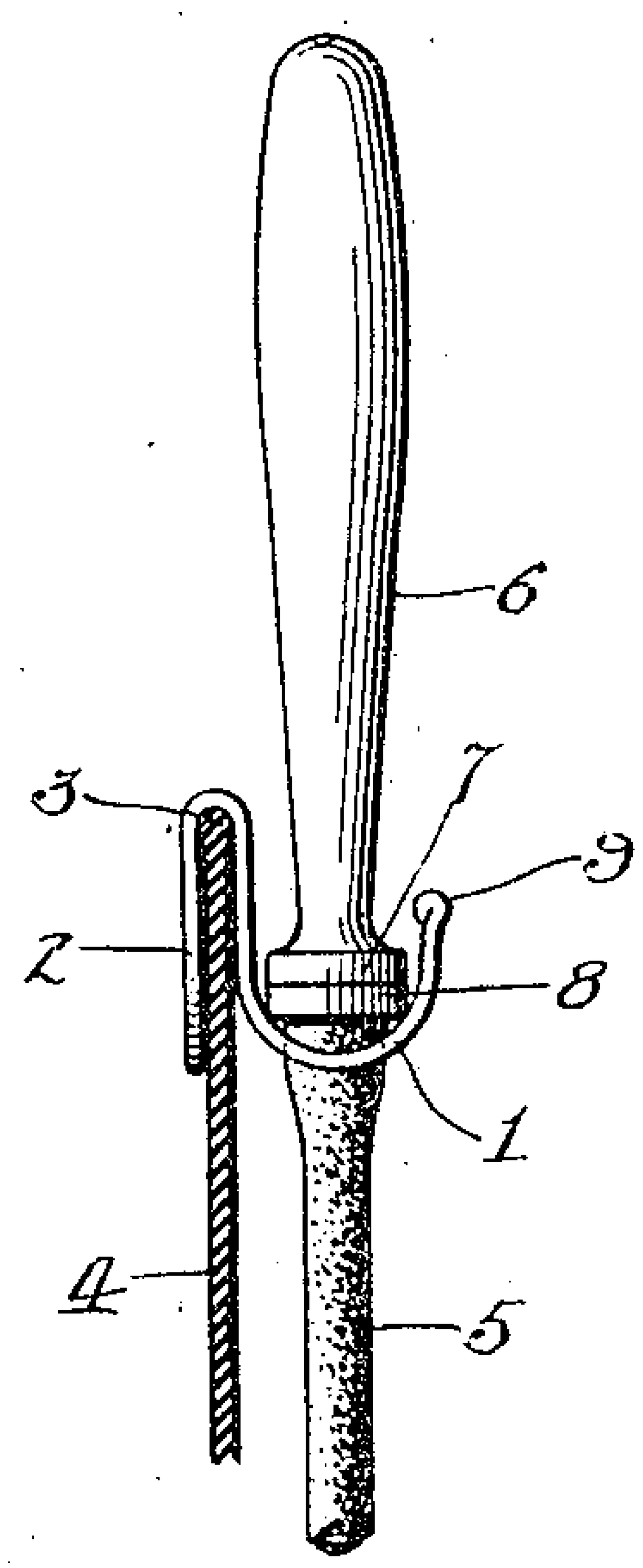


Fig. 3.

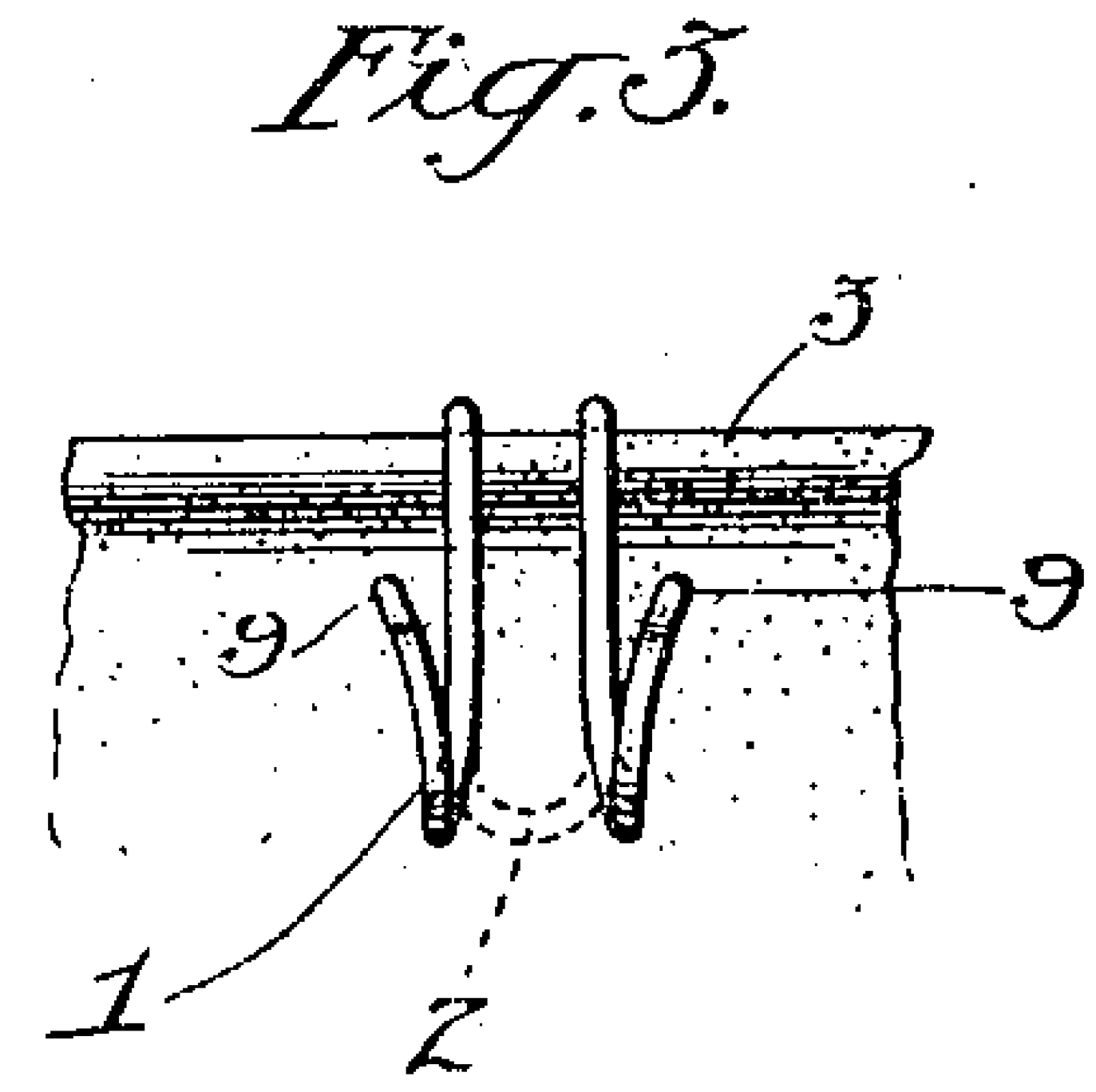
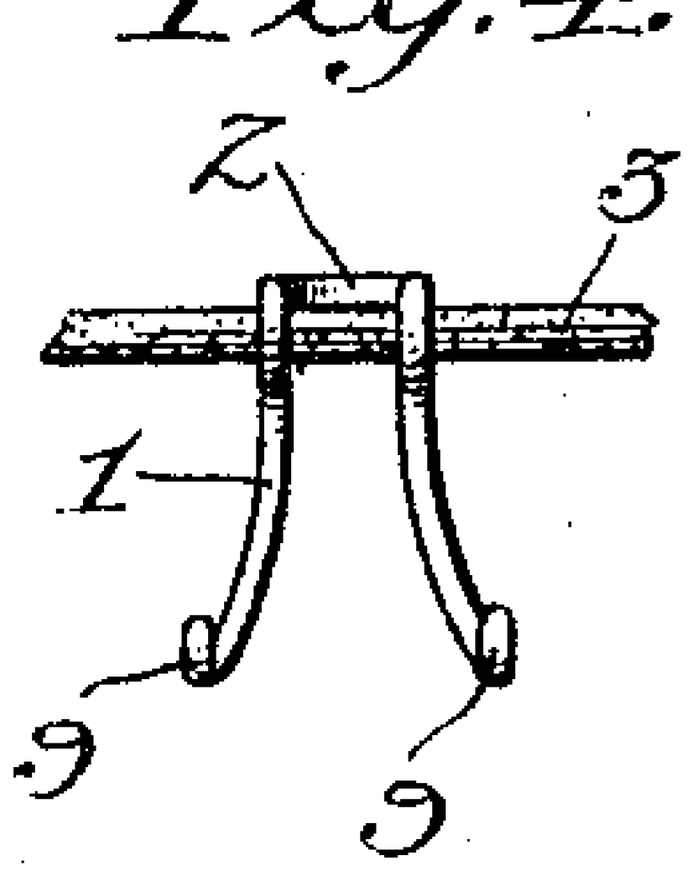


Fig. 4.



Witnesses:—
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UNITED STATES PATENT OFFICE.

NICHOLAS L. RIGBY, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO ALICE SLAUGHTER, OF LOS ANGELES, CALIFORNIA.

SUPPORT FOR NOZZLES OF FOUNTAIN-SYRINGES.

960,404. Specification of Letters Patent. **Patented June 7, 1910.**

Application filed July 30, 1906. Serial No. 328,462.

To all whom it may concern:

Be it known that I, NICHOLAS L. RIGBY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Support for Nozzles of Fountain-Syringes, of which the following is a specification.

This invention relates to a device adapted to be readily attached to a fountain syringe, which is adapted to support the nozzle and tubing when the nozzle is not being used. Heretofore it has been customary to hang the tubing over the edge of the mouth of the bag or reservoir with the nozzle hanging down inside the reservoir when the nozzle is not being used. These fountain syringes are extensively used in surgery, and in hospitals as well as in private homes and this common method of hanging the nozzle allows the pure contents of the reservoir, either water or other liquids, to become contaminated by the drippings from the overhanging nozzle, which necessitates a thorough cleansing or sterilization of the nozzle each time after use before it is hung over the edge of the reservoir, and one of the most important objects of this invention is to provide a simple and inexpensive device by means of which all of the foregoing disadvantages may be avoided; which will enable the tube with attached nozzle to be hung close to the reservoir but entirely outside with the nozzle inverted and in a vertical position so that nothing from the nozzle will drop into the bag; which will hold the nozzle free from contact with anything; which will permit the nozzle to be instantly and with the slightest effort placed in the support, and which will permit its removal therefrom with equal facility when the nozzle is to be used.

Another object is to provide a device of the character described which will support equally well nozzles of various designs or sizes.

Another object is to support the nozzle so that it is entirely free from contact with anything, thus obviating the necessity of sterilizing or cleaning it after each use.

The accompanying drawings illustrate the invention, and referring thereto:—Figure 1 is a perspective view of one form of fountain syringe constructed of rubber and equipped with the invention, the tubing and nozzle being shown supported by the device. Fig. 2 is an enlarged view showing a portion of the reservoir in section, the holder and nozzle supported thereby being shown in elevation. Fig. 3 is a front view of a portion of the reservoir with the supporting device attached. Fig. 4 is a plan view of the support in detail.

In its preferred form the device comprises a bifurcated hook 1 with a clip 2 adapted to be slipped over the edge 3 of the mouth of the reservoir 4 of the fountain syringe. 5 designates the tubing of the syringe which is equipped with a nozzle 6. The nozzles 6 which are used with the fountain syringes are of various forms and sizes, some of which are fastened to the tube by merely slipping them in the end of the tube; others are attached by screwing them into a nipple which is held in the end of the tube. In the drawings I have shown one of the latter type, the nozzle 6 having a shoulder 7 at the joint where it screws to a flanged nipple 8 in the tubing 5. As shown in Figs. 1 and 2 the flange of the nipple 8 rests on the hook 1 and supports the nozzle 6 in a vertical position, in which the nozzle is held out of contact with the reservoir, being entirely free from contact with anything.

The nozzle may be readily placed in the hook or removed therefrom with the greatest ease. The points of the hook are curled to form rounded ends 9 which do not catch on the tubing or nozzle, and the members of the forked hook at the bottom are flared outward as shown in Fig. 4 which permits easy entrance of the nozzle and also enables the hook to accommodate and hold nozzles of different sizes.

The legs or sides of the hook are normally placed so far apart that the pressure therefrom against the sides of the nipple, or the tube to which it is secured, is so slight, even with the larger sizes, that no damage is done to the rubber by pinching it, the intention being to hold the nipple by letting it rest in the hook rather than by frictional contact against its sides.

I prefer to construct the supporting device of wire, as shown, but do not limit myself to that as it might be made of sheet metal.

When made from wire, the wire is bent into a U-shape at its middle and each leg or end of the U is bent or folded upon itself inter-

mediate its ends in a plane substantially at right angles to the plane of the U with the free end substantially parallel with and at a short distance from the leg of the U, whereby a clamp is formed for engaging with a support. The remaining portions of said free ends are curved in a semi-circle outwardly and upwardly and their extremities diverge from each other whereby a wedge shaped opening is formed into the support. By constructing the device in this manner it can be made very cheaply and can be securely applied to the bag or reservoir as the outward curve of the free ends from the plane of the U as shown in Fig. 2, permits of the easy insertion of the edge of the reservoir into the clamps or spaces between said folded portions, and the nozzle can be readily inserted and removed from the yielding divided support formed by the two outwardly extending hooks. The divergence of the hooks permits of the nozzle being easily inserted into the support, yet permitting the main portions or curves of the hooks being placed so close together as to cause them to engage with the nozzle after it has been inserted and thereby prevent it from being accidentally displaced, and when the nozzle is in position it will be supported at four points around its periphery as will be readily understood from an inspection of Fig. 4.

What I claim is:—

The combination, with a reservoir having an open mouth at the top and means for suspending the same, and a flexible tube extending from the bottom, of a support formed from a single piece of wire bent into U-shape at its middle and having a portion of each leg of the U folded downward adjacent to the bent portion to form a clamp for engaging with the mouth of the reservoir, the legs being then curved outwardly and upwardly away from each other and from the reservoir, said legs being at a distance from each other at all points, and a nozzle at the end of said tube adapted to be supported in a vertical position at a distance from the reservoir by and between said curved portions of said legs.

In testimony whereof, I have hereunto set my hand at Los Angeles California this 23rd day of July 1906.

NICHOLAS L. RIGBY.

In presence of—
GEORGE T. HACKLEY,
FRANK L. A. GRAHAM.