No. 743,806. PATENTED NOV. 10, 1903.

B. BAUMGARTNER.

WIRE FENCE MACHINE.

APPLICATION FILED DEC. 13, 1902.

NO MODEL. 3 SHEETS—SHEET 1.

Fig. 1.

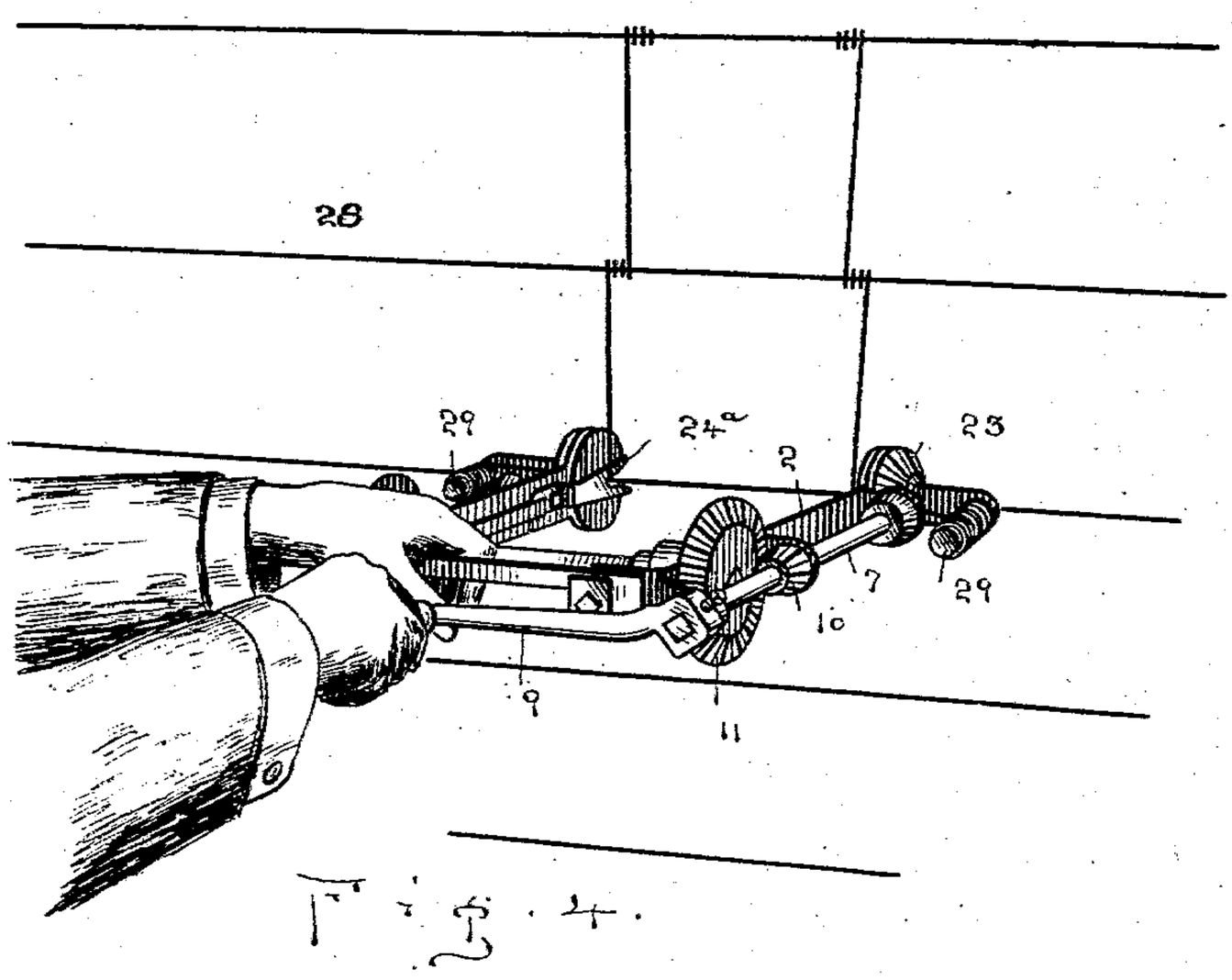

Fig. 4.

Fig. 2.

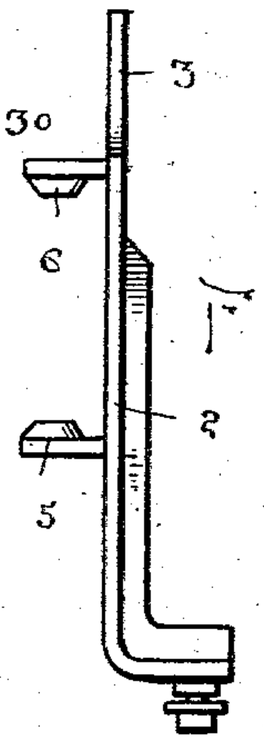

Fig. 3.

Witnesses
J. W. Riley
B. F. Funk

Inventor
Blassie Baumgartner.

By Victor J. Evans
Attorney.

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NO MODEL. 3 SHEETS—SHEET 2.

Fig. 5.

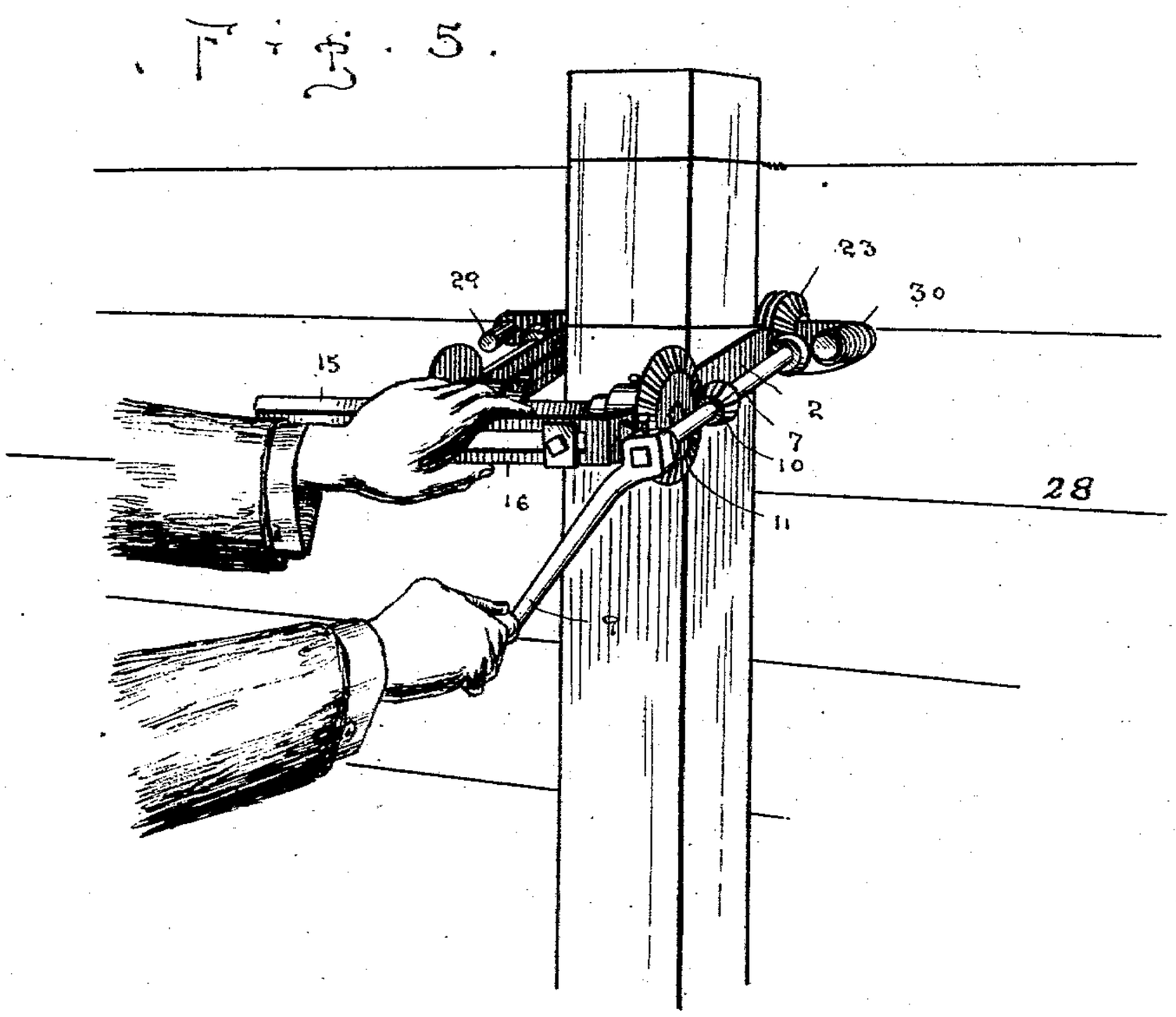
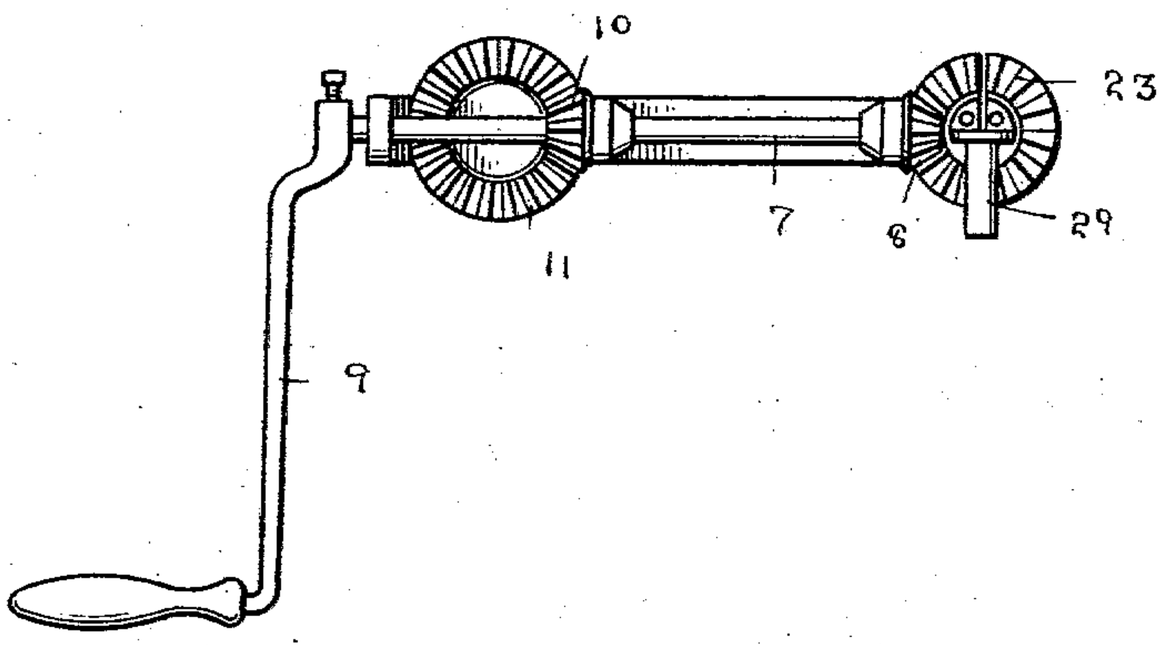


Fig. 6



Witnesses
J. W. Pierce
B. L. Dunk

Inventor
Blassie Baumgartner.

By Victor J. Evans
Attorney

No. 743,806. PATENTED NOV. 10, 1903.

B. BAUMGARTNER.

WIRE FENCE MACHINE.

APPLICATION FILED DEC. 13, 1902.

NO MODEL

3 SHEETS—SHEET 3.

Fig. 7

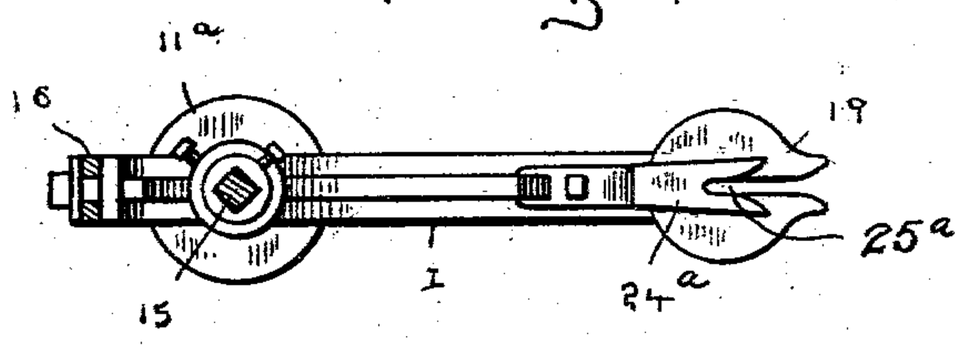


Fig. 9.

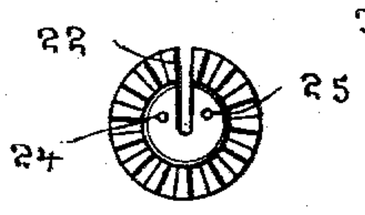


Fig. 8

Fig. 11.

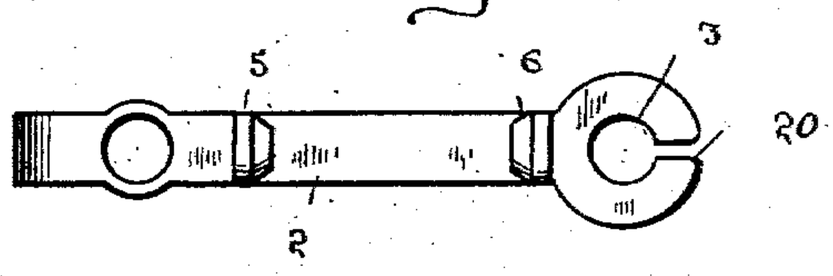
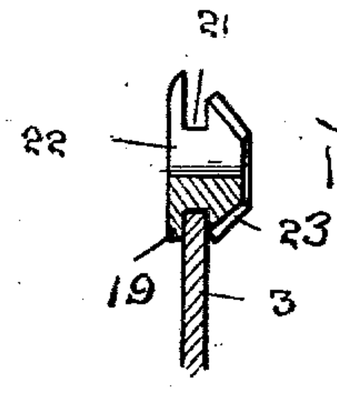


Fig. 10.



Witnesses.
F. W. Perry.
B. D. Funk

Inventor
Blassie Baumgartner.

By Victor J. Evans.

Attorney

No. 743,806. Patented November 10, 1903.

UNITED STATES PATENT OFFICE.

BLASSIE BAUMGARTNER, OF WAXAHACHIE, TEXAS.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 743,806, dated November 10, 1903.

Application filed December 13, 1902. Serial No. 135,160. (No model.)

To all whom it may concern:

Be it known that I, BLASSIE BAUMGARTNER, a citizen of the United States, residing at Waxahachie, in the county of Ellis and State of Texas, have invented new and useful Improvements in Wire-Fence Machines, of which the following is a specification.

This invention relates to wire-fence machines; and the object thereof is to provide a machine which can be readily operated to attach the stay to the line-wires of a fence at the proper distances apart or attach tie-wires to the line-wires, so as to embrace the post or stays of the fence.

Other objects as well as the novel details of construction will be specifically described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the machine, showing the position thereof during the process of attaching the stay-wires to the line-wires of a fence. Fig. 2 is a top plan view of the fence-machine. Fig. 3 is a similar view of one of the side arms or castings. Fig. 4 is a detail perspective of one of the spool-spindles. Fig. 5 is a perspective view of the machine, showing its position during the process of attaching a tie-wire to a line-wire, so as to support the line-wire to a fence-post. Fig. 6 is a side elevation of the machine. Fig. 7 is a transverse vertical section of the machine. Fig. 8 is a top plan view of a slightly-modified form of the machine. Fig. 9 is a detail view of one of the twisting-gears. Fig. 10 is a transverse vertical section through one of the twisting-gears and an engaging part. Fig. 11 is a side elevation of one of the arms or castings for carrying the gear.

In carrying out the invention two castings or arms 1 and 2 are used, each of which comprises a straight strip forming a circular split bearing 3 on the respective ends thereof. The other end of the strip is bent at right angles to the body of the strip, and intermediate the longitudinal edges are arranged bracing-ribs 4. On the opposite side from the ribs are bearings 5 and 6 in the form of perforate lugs, and through these bearings projects a shaft 7, on one end of which is a beveled pinion 8, and on the other end of the shaft is a crank 9. Intermediate the ends of the shaft is a second pinion 10, which meshes with a beveled gear 11, having a sleeve 12 thereon, which projects through a bearing 13 in the arm 2 and is held against displacement by a collar 14, which bears against the sleeve 12. The sleeve 12 is provided with a rectangular opening, through which projects one end of an adjustable bar 15, conforming to the shape of the opening and to which the sleeve is secured.

By reference to Figs. 1 and 2 it will be observed that in the preferred form of the device the two arms 1 and 2 are connected at their rear ends by a slotted bar 16, the bolts 17 and 18 being designed to clamp the bar to the arms 1 and 2 at any determined point of adjustment. When the arms are brought together to decrease the distance between them, of course the bar 15 will also project through the sleeves of the gears, and when the proper adjustment is reached a rigid connection can be made.

On the end of the arm 2 opposite to the one in which is secured a gear 11 is a geared guide-disk 19, said disk being connected to the sleeve-gear 23 by a restricted collar 21, whereby a groove is formed for engagement with the edges of the bearings 3, in which the collar is seated. This twist-disk is provided with a slot 22, coinciding with the slot 20 in the bearing 3, and on either side of the slot 22 are perforations 24 and 25, the purpose of which is to receive the two parallel fingers 26 and 27, carried on one end of the spindle-arm 28, the spindle 29 on the opposite end of the spindle-arm being designed for the purpose of receiving the spool or bobbin wire 30. The fingers 26 and 27 are at right angles to the arm 28 and are oppositely disposed with relation to the spindle 29, so that the spool will be practically in a vertical plane when the stay-wires are applied to the fence. A construction similar to the one just described is carried by the casting or arm 1, with exception that the shaft 7^a terminates at the point adjacent to the pinion 10^a, it not being necessary to extend the shaft farther for engagement with the crank. The bar or angular shaft 15 extends through an opening in the sleeved gear 11^a, so that when the gear 11 is turned the gear 11^a will simultaneously rotate therewith, imparting motion to the shaft 7^a, whereby the gear 23^a will be turned to con-

form to the rotation of the gear 23. As each gear 23^b and 23^a carries a spool-spindle, the spool-spindle will be rotated around the line-wires to make the twist, as will be explained hereinafter. On the inner side of either or both of the arms 1 and 2 are the bifurcated guides 24^a, having a slot 25^a registering with the slot in the disk gears 23 and 23^a.

When it is desired to construct the fence, the line-wires 28 are arranged at proper intervals and stretched along the post, being tightened to the desired tension. The ends of the strands of the respective spools on the machine are then passed through the coinciding slots 22 and 25^a, the free ends being wound around the wires, as shown in Fig. 1. The slotted portions of the machine are then brought into engagement with the succeeding wire, and the crank is turned, so as to encircle the line-wire, thus causing the wire to become wrapped around the line-wire a sufficient number of times. Then the machine is removed to the next or succeeding line-wire until the entire stay is formed. By arranging arms 1 and 2 proper distances from each other two stays can be fastened at one time, and the distances apart can be readily regulated by adjusting the arms upon the bars 15 and 16. In order to support the line-wires on the post, the wire is caused to rest within the slots 22 and 25^a. The arms 1 and 2 are then adjusted to rest against the sides of the posts. One end of a wire strand on one of the spools is then wound around the line-wire on one side of the post, and by turning the crank 9 the other end will be tightly twisted around the line-wire on the opposite side of the post, causing the post to become firmly embraced by the two wires, so that the line-wire will be effectually supported.

In Fig. 8 a slightly-modified form of machine is illustrated in which the crank 27^a is fastened direct to the bar or shaft 15, the shaft 7^b terminating at a point adjacent to the gear 11. In all other respects the machine is substantially the same as shown in the preferred form, and the operation thereof will be the same.

In the illustrations I have shown but two methods of operating the device. However, it is obvious that the device can be utilized for a multiplicity of purposes, such as for wrapping wire, cord, or other material around cores or spindles for purposes other than fence-making.

I have illustrated the preferred forms of my invention; but I reserve a right to make such changes and alterations as may suggest themselves from time to time without departing from the spirit or sacrificing the advantages of the same.

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

1. A wire-fence machine having a driven rotary disk provided with a slot and a plurality of perforations, of a spool-holder comprising an arm, on one end of which is a spindle for holding the spool and right-angularly-disposed fingers or pins projecting from the other end of the arm and removably engaging the perforations in the disk.

2. In a machine of the character described, the combination with a pair of arms having slotted bearings, of rotary disks mounted in the bearings and provided with slots coinciding with the slots in the bearings, spool-holding devices removably engaging the disks and having spindles on their ends to receive the spool.

3. In a machine of the character described, the combination with a pair of adjustable arms, of an angular shaft projecting through bearings in the arms, of two sets of gearings, one set being carried by each arm and simultaneously driven by the angular shaft, and a slotted twisting-disk carried by the end of each arm and operated by the gearing, and a removably-secured spool-holding device carried by each disk for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

BLASSIE BAUMGARTNER.

Witnesses:

J. J. McQUATTERS,

J. F. PHILLIPS.