

No. 614,790.

Patented Nov. 22, 1898.

M. CAMPBELL.
PLOW.

(Application filed July 25, 1894.)

(No Model.)

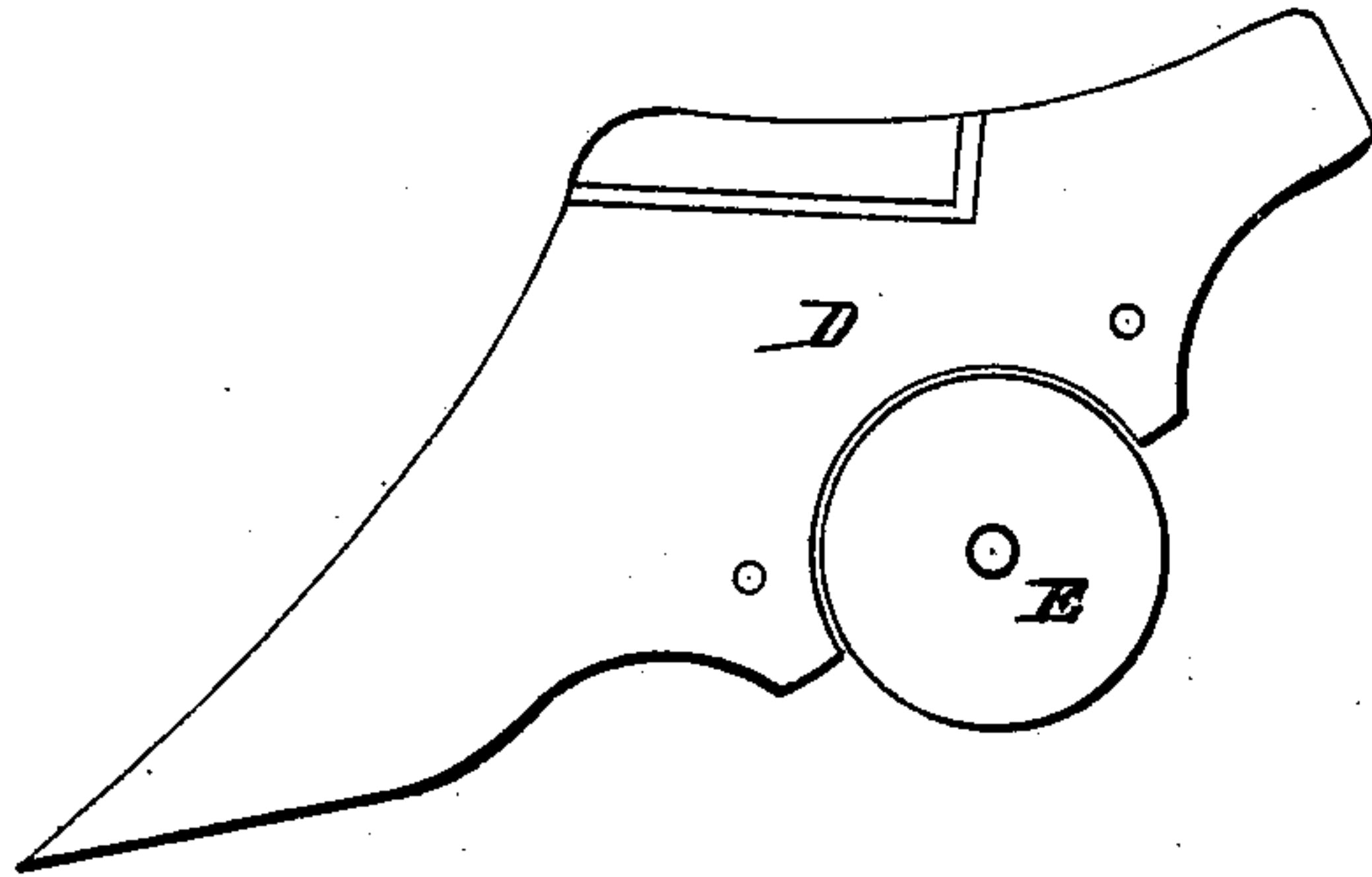


FIGURE. 1

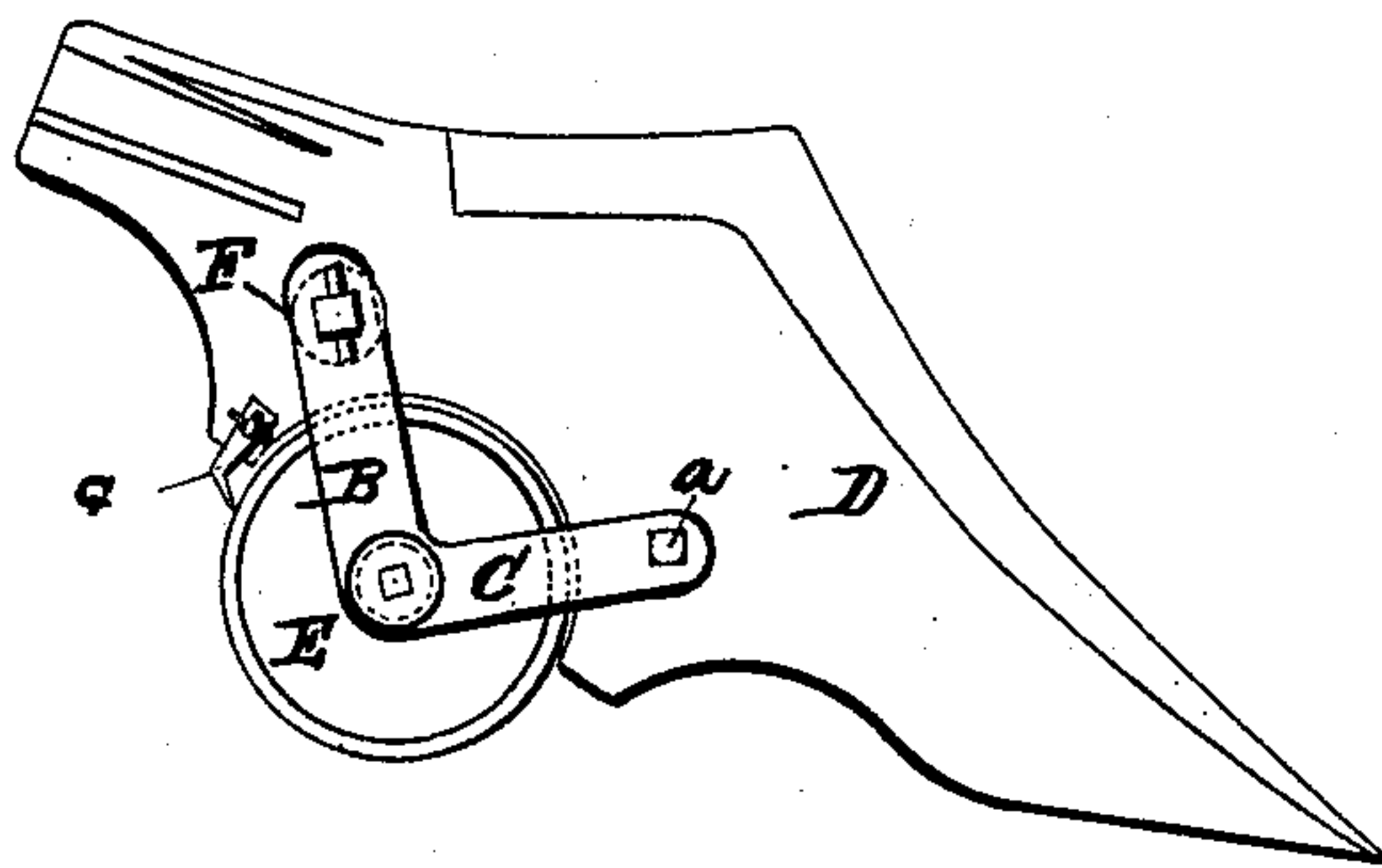


FIGURE. 2

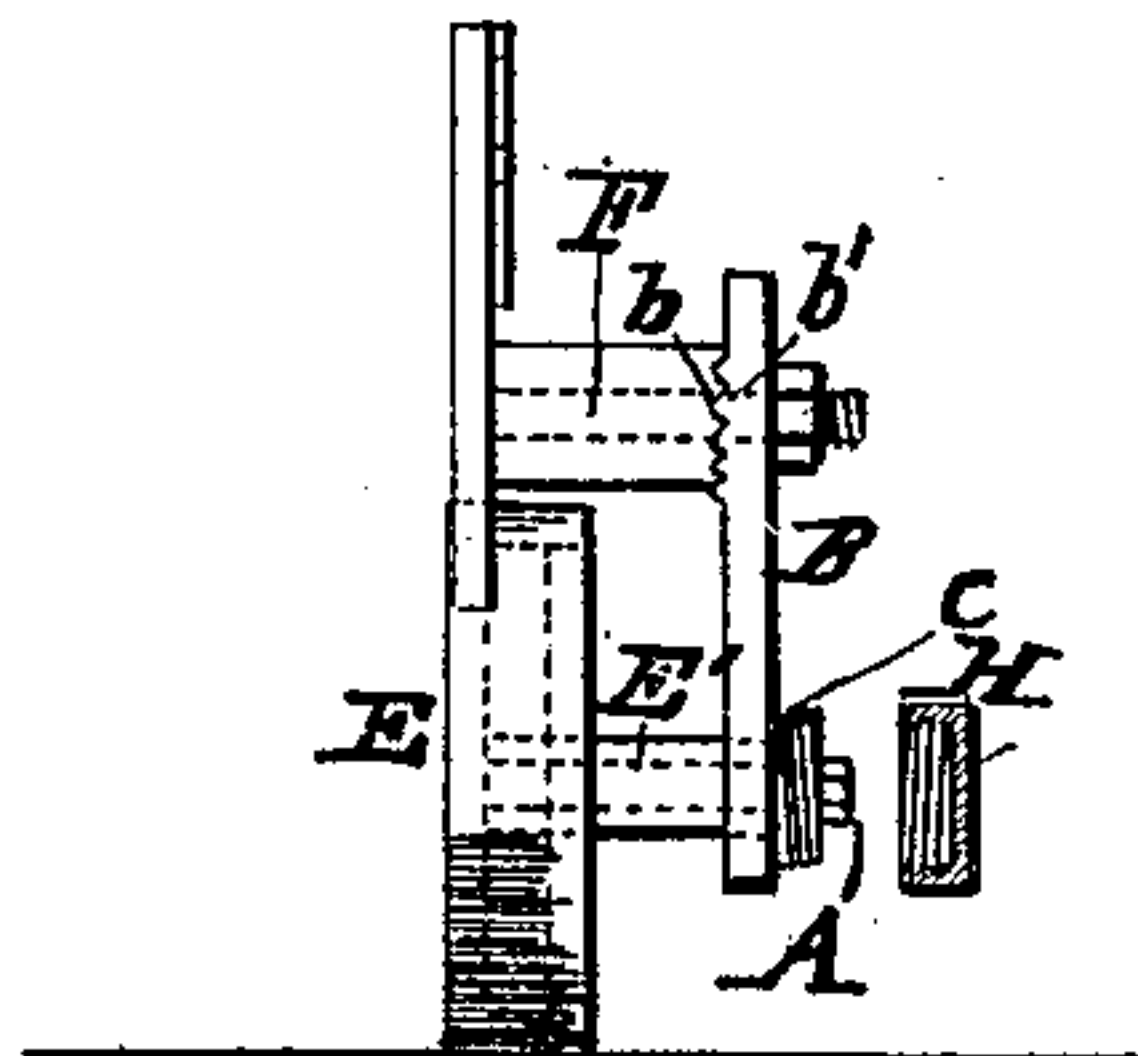


FIGURE. 3.

WITNESSES

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MALCOLM CAMPBELL, OF CROSWELL, MICHIGAN.

PLOW.

SPECIFICATION forming part of Letters Patent No. 614,790, dated November 22, 1898.

Application filed July 25, 1894. Serial No. 518,602. (No model.)

To all whom it may concern:

Be it known that I, MALCOLM CAMPBELL, a citizen of the United States, residing at Crosswell, in the county of Sanilac and State of Michigan, have invented certain new and useful Improvements in Plows, (for which I have received Letters Patent in Canada, No. 46,989, dated September 7, 1894,) and which is made and used substantially as set forth hereinafter and as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing the landside of the plow in detail. Fig. 2 shows the same from the opposite face. Fig. 3 is an elevation showing wheel and attachments for raising and lowering the plow in detail from the rear.

This invention consists in making and arranging certain of the details of a plow substantially as shown and set forth to improve the plow and its working and ease of draft.

The frame and general construction of the plow are made in any desired or suitable manner in the parts not shown and those not otherwise stated. Instead of a long landside-heel to the plow it is made with a landside-wheel E for support of the rear of the plow to regulate its depth and act as a pivot in raising and lowering the point in use.

This wheel is mounted on an axle A, held by a holder made, as shown in Fig. 2, with two arms B C. The arm C is held by a pivot-bolt *a* to the plow D in front and the arm B is held by a projection F above. The face of the end of projection F is corrugated crosswise, as at *b*, and to this corrugation is fitted a like corrugation *b'* on the side of arm B, so as to fit it at either of a number of elevations or points. The holder is pivoted by a pivot-bolt in its arm B, so it may be turned on such holding-bolt as a lever to lift or depress the wheel E to adjust it properly to the running of the plow desired, and the arm C is slotted to allow of adjustment up and down on a holding-bolt in projection F to promote movement of the hanger as a lever in such adjustment of the wheel, and the corrugations on the arm B and projection F promote holding of such adjustment at the fixed point desired by

means of a holding-nut *c* on the bolt in the projection F. There is a scraper G, held to act on the wheel behind to clean it, which is fitted for adjustment to fit the wheel as it may require by reason of such adjustment or otherwise.

The wheel E has a long hub or sleeve E' bearing on the axle A to cause it to run true and steady on it.

The axle A is held firmly bracketwise on the holder by a shoulder bearing on the axle where it enters the holder and a nut screwed up firmly on the end of the axle outside of the holder. The wheel is held on the axle at the other end by a head or enlargement on the axle, and friction-washers may be used for the ends of the hub to wear against.

To prevent the nut on the end of the axle from being loosened by striking objects as the plow is used and allow the wheel to get loose, a cap H is fitted with a screw-thread to screw onto the outside of such nut, which is also provided with screw-threads to engage in the cap, arranged so that if anything acts to unscrew the nut it will only act on the cap and leave the nut held firmly. This is also arranged so that the nut can be screwed up solidly by means of the cap, which screws up solidly on the nut therefor.

I claim—

The combination, with a plow of the right-angled or bell-crank lever, with one end connected by a pivot-bolt to said plow, and its opposite slotted end provided with a corrugated inner side engaging an end-corrugated projection of said plow said end-corrugated projection having a screw-threaded extension passing through the slotted end of said lever and suitably nutted and the wheel with its sleeve-like hub compassing an axle suitably secured in position, said axle having its wheel-securing nut screw-threaded and fitted with a screw-threaded cap adapted to prevent the accidental unscrewing of said nut, substantially as set forth.

MALCOLM CAMPBELL.

In presence of—

JOHN F. MURPHY,
P. O. WAGENER.