

(No Model.)

C. S. PARK.
CAR COUPLING.

No. 485,804.

Patented Nov. 8, 1892.

Fig. 1.

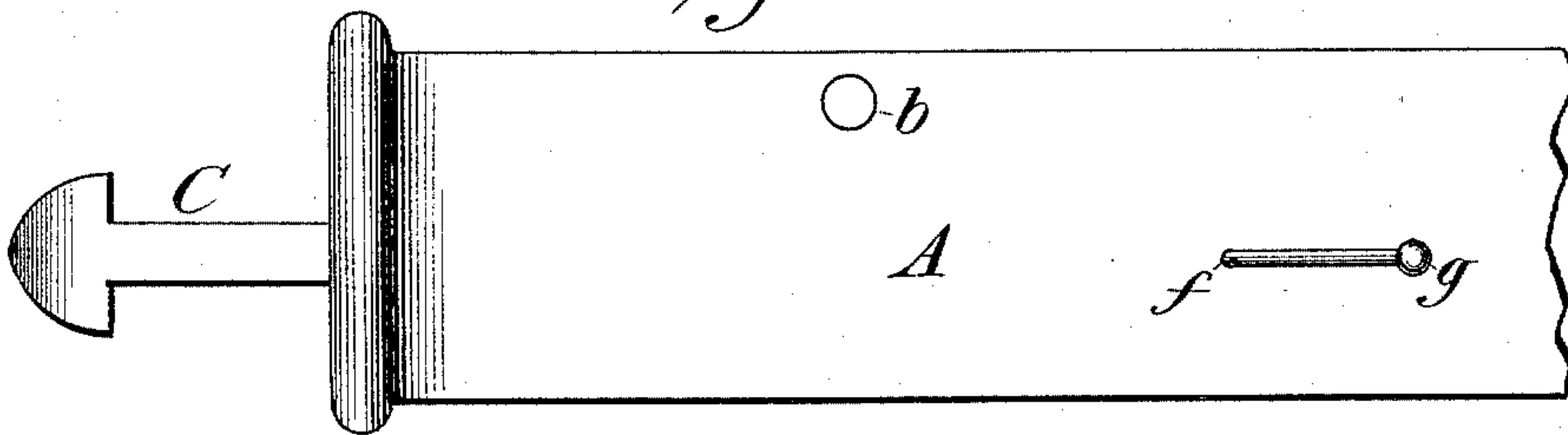


Fig. 2.

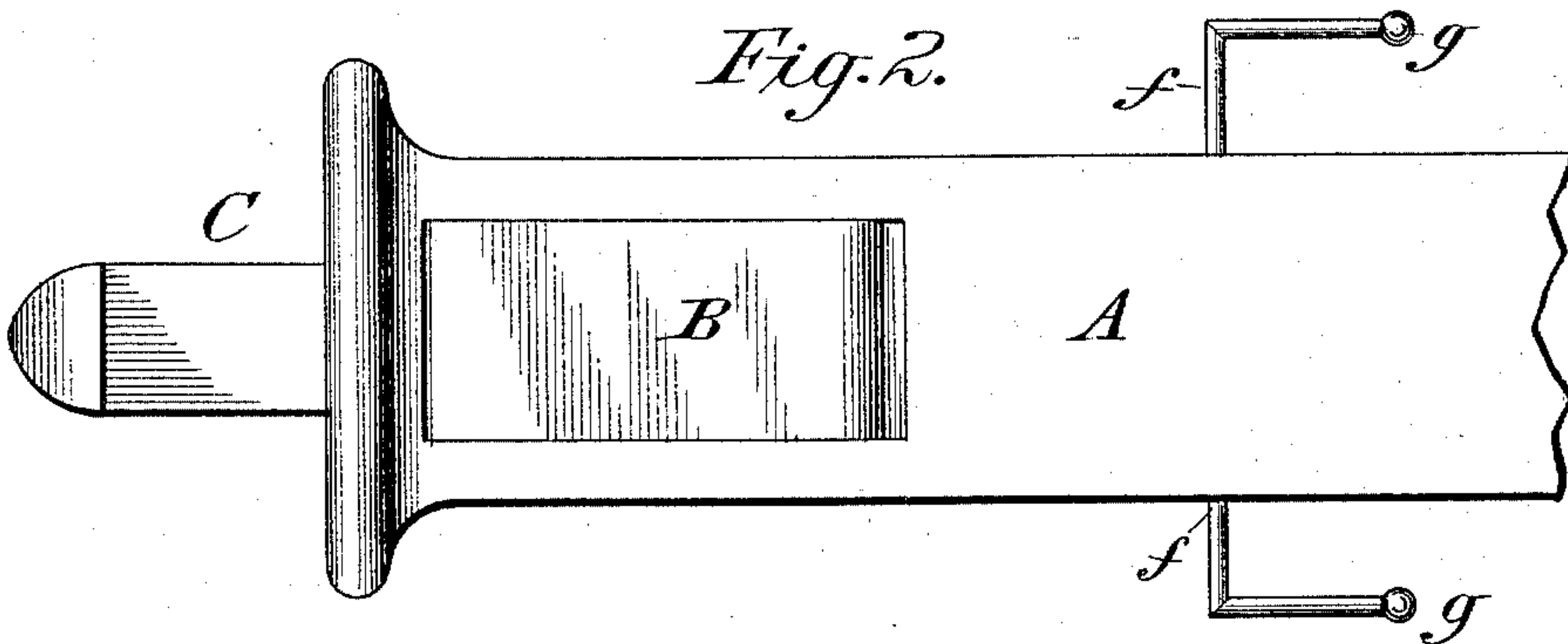
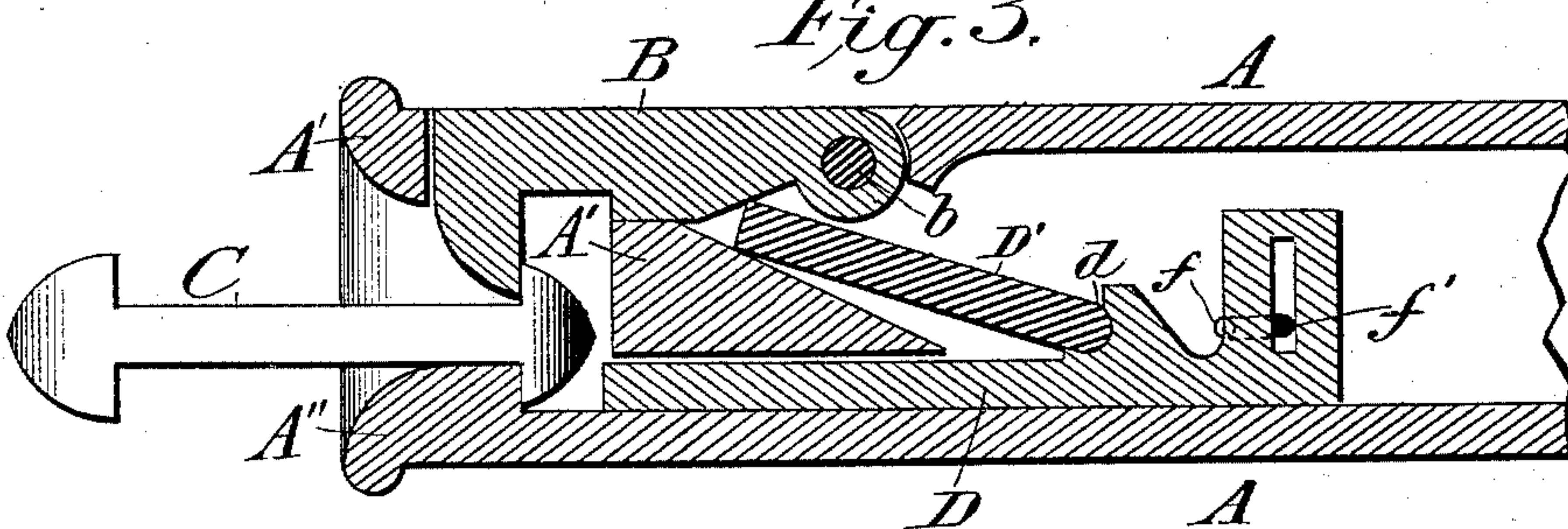


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES S. PARK, OF DEERFIELD, MASSACHUSETTS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 485,804, dated November 8, 1892.

Application filed March 21, 1892. Serial No. 425,852. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. PARK, of the town of Deerfield, in the county of Franklin and State of Massachusetts, have invented
5 an Automatic Safety Car-Coupling, of which the following is a specification.

The object of my invention is to provide an automatic car-coupler which insures safety in the act of "shackling" and "unshackling" rail-
10 road-cars when in motion or at rest.

My invention is shown in the accompanying drawings, making part of this specification, in which—

Figure 1 shows an elevation. Fig. 2 shows
15 a top view. Fig. 3 shows a section on dotted line X Y.

My invention, as will be seen by the drawings, differs very little in its outward appearance from the ordinary car-coupler in general
20 use, but is radically different in its mechanism, which is shown in detail in the sectional drawing, Fig. 3.

A is the outside case or shell, which incloses mechanism of the invention and the arrangements whereby it is operated and is made of
25 cast-iron or other suitable material. This shell is cored out or hollow its entire length, having only a solid bar A' running across it and connecting the two sides together. This
30 bar also serves as a stop for the spear-headed link or shackle C, and also as a guide for the upper part of the double slide D D'. It is also made with a recess A'' on the lower side, so arranged as to engage the hook on the
35 shackle C.

B is a latch hung on a center or pin b, having a hook on its outer end, which engages with the corresponding hook on the shackle C. It is plainly evident that the ordinary
40 open link may be used with this coupler by having the hook on latch B narrow, so as to drop into the space between the two sides of the link. I am aware that a swinging hook or latch has been used previously for this
45 purpose, and I do not claim that as a part of

my invention, which consists in the means whereby I release the shackle from engagement with the coupler. I do this by means of the double slide D D', hinged together at d and operated by the slot and crank f', swing-
50 ing on its central shaft f, or by a hinged bent lever, or by means of any of the well-known methods used by mechanics for producing a reciprocating motion.

The operation of my invention is as follows: The link or shackle C being in engagement with the coupler and it is desired to release the same, the handle g of the crank f' is brought toward the end of the coupler. This movement of the crank throws the double
60 slide D D' forward, and the lower part D, pressing against the curved end of the link C, lifts it out of the recess A'', while at the same time the upper part D', rising on the incline A', impinges against the lower side
65 of the hook B, thus releasing both sides of the spear-headed hook C simultaneously. The handle g being returned to its normal position, the coupler is ready to automatically act when the spear-headed link C is entered at
70 the mouth of the coupler. The link passes in as far as the stop A', drops into the recess A'', while the swinging hook B engages the upper part of the link, both acting automatically and without personal attention or risk.
75

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The double slide D D', in combination with the incline A', whereby the upper part of the double slide D D' is made to impinge
80 upon the lower side of the swinging hook B, substantially as and for the purposes herein specified.

2. The double slide D D', in combination with a link and swinging catch, substantially
85 as herein described.

CHARLES S. PARK.

Witnesses:

M. E. PARK,
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