

No. 780,597.

PATENTED JAN. 24, 1905.

J. P. CLARK.
MAGAZINE TORPEDO PLACER.

APPLICATION FILED MAY 23, 1904.

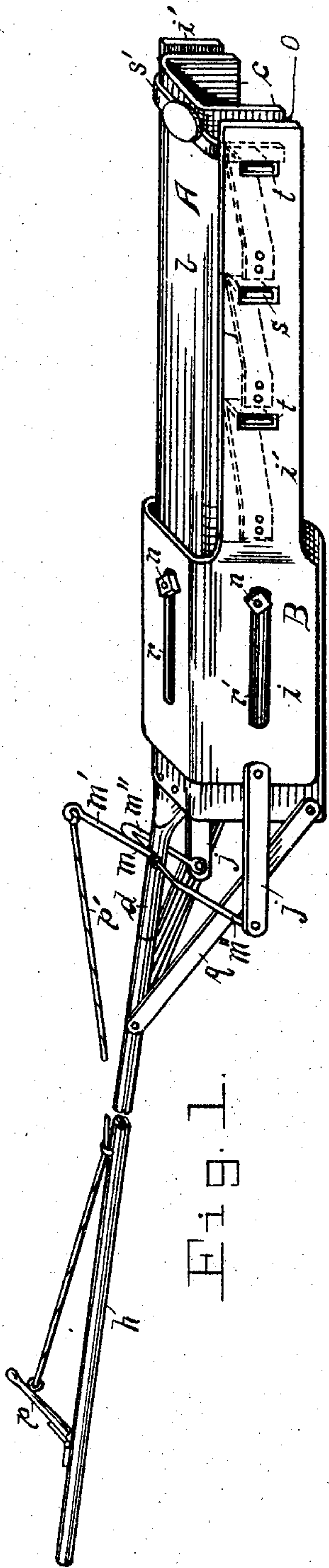


Fig. 1.

WITNESSES:
By A. B. Davis.
Geo. J. Richman.

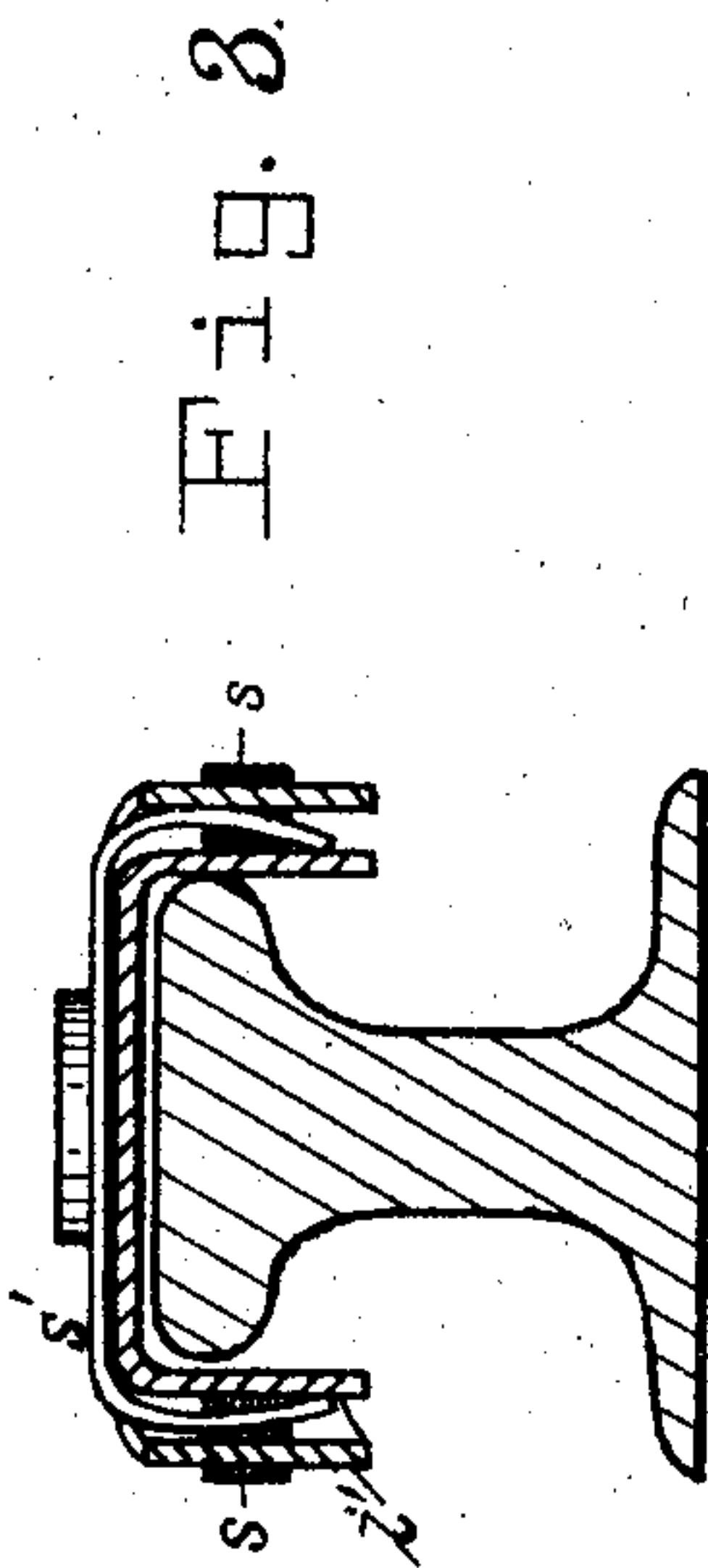


Fig. 3.

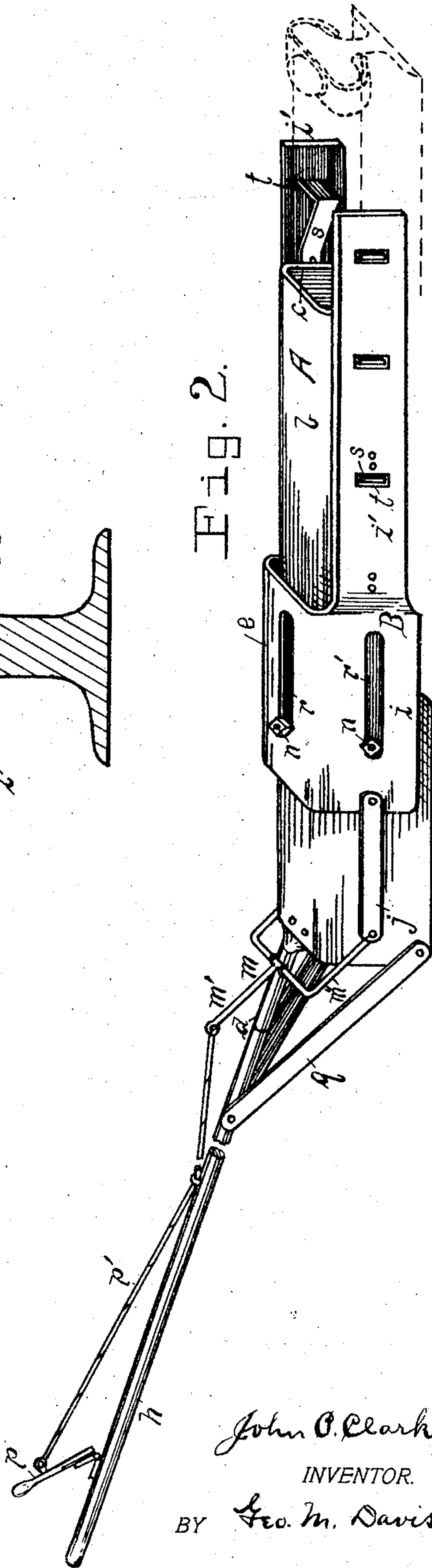


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN P. CLARK, OF TERRE HAUTE, INDIANA, ASSIGNOR OF ONE-HALF
TO GEORGE J. RIEHM, OF TERRE HAUTE, INDIANA.

MAGAZINE TORPEDO-PLACER.

SPECIFICATION forming part of Letters Patent No. 780,597, dated January 24, 1905.

Application filed May 23, 1904. Serial No. 209,229.

To all whom it may concern:

Be it known that I, JOHN P. CLARK, a citizen of the United States, residing in Terre Haute, in the county of Vigo and State of Indiana, have
5 invented certain new and useful Improvements in Magazine Torpedo-Placers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to that class of tor-
15 pedo-placers whereby that class of torpedoes commonly called "railroad-torpedoes" are placed upon the rails of a railroad-track to serve as signals to approaching trains, where-
by the torpedo so placed is exploded.

20 The objects of my invention are, first, to provide a device whereby torpedoes may be attached to a railroad-rail at any desired point from a moving train; second, to provide such a device whereby one, two, or more torpedoes
25 may be attached to a rail from a moving train at any desired point and at any desired distance apart to comply with the rules of railroad companies relative to the various torpedo-signals in common use. These objects I attain
30 by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the invention in normal position and showing the maga-
zine filled with torpedoes. Fig. 2 is a per-
35 spective view of the device, showing its position immediately after placing a torpedo upon a railroad-rail. Fig. 3 is a cross-section of the device, showing the position of a torpedo therein.

40 Similar letters of reference refer to similar parts throughout the several views.

The letter A indicates the body of the placer, which consists of sheet metal bent or formed similar to channel-iron, with a top *b* and two
45 pendent side walls *c*. A metallic handle-socket *d* is riveted to the rear edge of the top *b*.

The letter B indicates a metallic retainer, which consists of the top *e* and two pendent side walls *i* and which are formed similar to

A and adapted to fit over and slide back and
50 forth upon the same. The forward position of the top *e* of the retainer is cut away, exposing the top *b* of the body A, and the side walls *i* project forward to the end of A, forming the jaw-like portions *i'*. The jaws *i'* are
55 bent outward at their base, thereby leaving an open space *o* between the jaws and the side walls *c* of A for the purpose hereinafter set forth and designated hereinafter as the
60 "magazine." Long slots *r* and *r'* are cut in the top *e* and side walls *i* of the retainer, respectively, for the purpose of receiving
rivets *n*, which project from the walls of A and by the heads of which the retainer is
65 held in position upon the body A. One, two, or more sets of flat springs *s*, with angular
ends, are riveted to the inner walls of the jaws *i'*, extended forward and press inwardly
70 against the walls *c* of the body A, with the angular ends thereof projecting at right angles from said walls *c* through slots *t*, provided therefor in the jaws *i'*, for the purpose
hereinafter set forth. Two connecting-rods
75 *j* are movably attached to the rear edge of either of the walls *i* of the retainer in line with the slots *r'* and are attached at their op-
posite ends to the lever *m*. The lever *m* consists of an upright stem *m'* and two pendent
80 arms *m''*, integral with each other and fulcrumed upon the handle-socket *d* by means of eyelets *v*. The pendent arms *m''* of the lever *m* are movably attached to the connecting-rods
j. A handle *h* is mounted in the socket *d* and bears near the extreme end a hinged lever *p*,
85 which is connected with the upright stem *m'* of the lever *m*. A metallic brace *q* is attached to either side of the socket *d* and the lower rear corners of the pendent walls of A, re-
spectively.

To place torpedoes upon a rail with my de-
90 vice, I use a torpedo mounted upon a circular spring *s'*, the converging ends of which I expand and force astride the body A and into the spaces *o* between the walls of A and the
jaws *i'*, respectively, and immediately in front
95 of the angular ends of the first set of springs *s*, and if more than one torpedo is to be placed I fix other torpedoes in front of the succes-

sive sets of springs *s*, in which position the torpedoes are firmly held by the retainer and the contraction of the springs upon which the torpedoes are mounted. When the torpedo-placer is so loaded, the operator standing upon the rear platform of a car places the pendent walls of the body A astride one of the rails behind the car by means of the handle *h*, and by drawing back the lever *p* he drives the retainer B forward upon the body A and the springs *s* push the torpedo-bearing springs *s'* forward the length of one stroke, which is regulated by the length of the slots *r* and *r'*, whereby the forward torpedo is expelled beyond the end of the body A, whereupon the springs *s'*, bearing the same, instantly contract and clench the flange of the rail, as shown in Fig. 2. The retainer is then withdrawn to normal position, whereby the springs *s'*, pressing against the unresisting sides of the springs *s*, force the angular ends thereof through the slots *t* and allow the same to slip behind the following torpedo-bearing spring, thus advancing each torpedo in the magazine one position. By repeating the operation each torpedo in the magazine may be placed upon the rail at any desired point. It is apparent that the capacity of my device may be increased by simply lengthening the magazine and increasing the number of the springs *s*.

The advantages claimed for my invention over similar devices used heretofore consist, first, in the ease and accuracy with which torpedoes may be placed therewith; second, by means of my device two or more torpedoes may be placed immediately following each other or at given distances apart without reloading the placer, whereas with similar devices used heretofore but one torpedo can be placed accurately and safely at a time, and consequently two cannot be placed close together from a rapidly-moving train; third, in the great saving of time, expense, and labor gained by the operation of my placer without slacking or stopping trains, and, fourth, the greater degree of safety afforded two trains running close together in cases of emergency, requiring quick warning to the following train.

Having described my invention, its use and

operation, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. In a magazine torpedo-placer, the combination of a body or form A provided with two pendent side walls *c*, and three bolts or rivets *n*, adapted to engage in the slots *r* and *r'* of the retainer B, with the retainer B, provided with two projecting jaws *i'* and three slots *r*, *r'*, adapted to engage the bolts *n* and the slots *t*, said retainer adapted to slide back and forth upon the form A, one or more angular springs *s* attached to the inner walls of the jaws *i'* and pressing against the outer walls of A, the socket *d* and handle *h* attached to the rear edge of A, the forked lever *m*, mounted upon the socket *d* and in movable connection with the connecting-rods *j*, the two connecting-rods *j* connecting the forks of the lever *m* and the retainer B, the braces *q*, the hinged lever *p* attached to the outer end of the handle *h*, and the cable *p'* connecting the hinged lever *p* and the stems *m'* of the lever *m*, all substantially as described and shown and for the purpose set forth.

2. In a magazine torpedo-placer, the combination of a body or form A with two pendent walls *c*, adapted to engage the tread of a railway-rail, with a movable retainer mounted upon A and provided with two projecting jaws *i*, and one or more angular springs *s* attached to the inner walls of the jaws *i* and adapted to engage and push the spring of a torpedo from the form A as described, a handle *h* and socket *d* attached to the form A, the hand-lever *p*, the cable *p'*, the forked lever *m*, the connecting-rods *j*, adapted together to propel the retainer B back and forward upon the form A, the braces *q*, and spaces *o* formed by the corresponding walls of A and B, adapted to receive the spring of a torpedo, all substantially as shown and described and for the purposes set forth.

In testimony that I claim the foregoing as my own I have affixed my signature in the presence of two witnesses.

JOHN P. CLARK.

Witnesses:

GEO. J. RIEHM,

GEORGE M. DAVIS