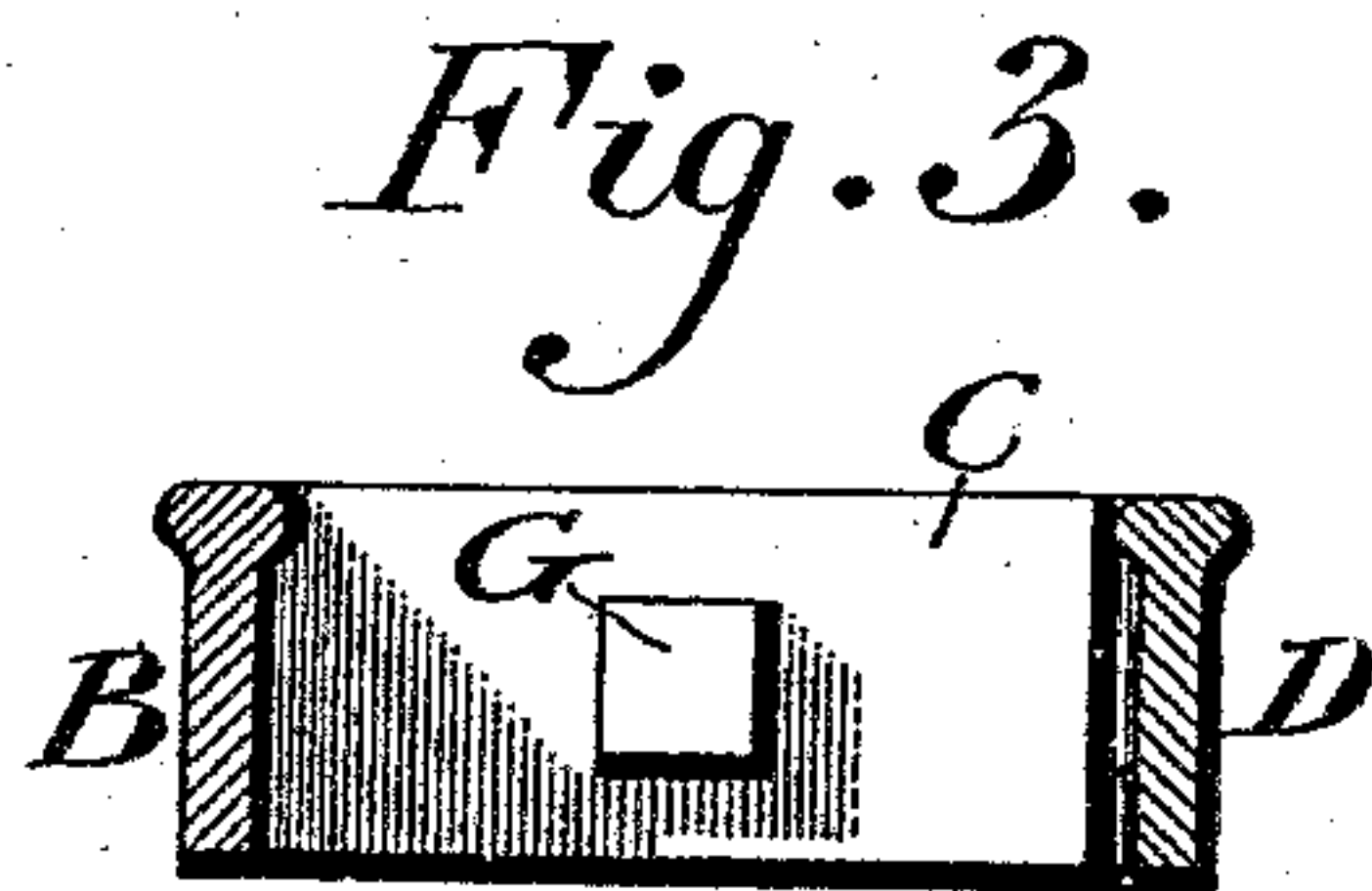
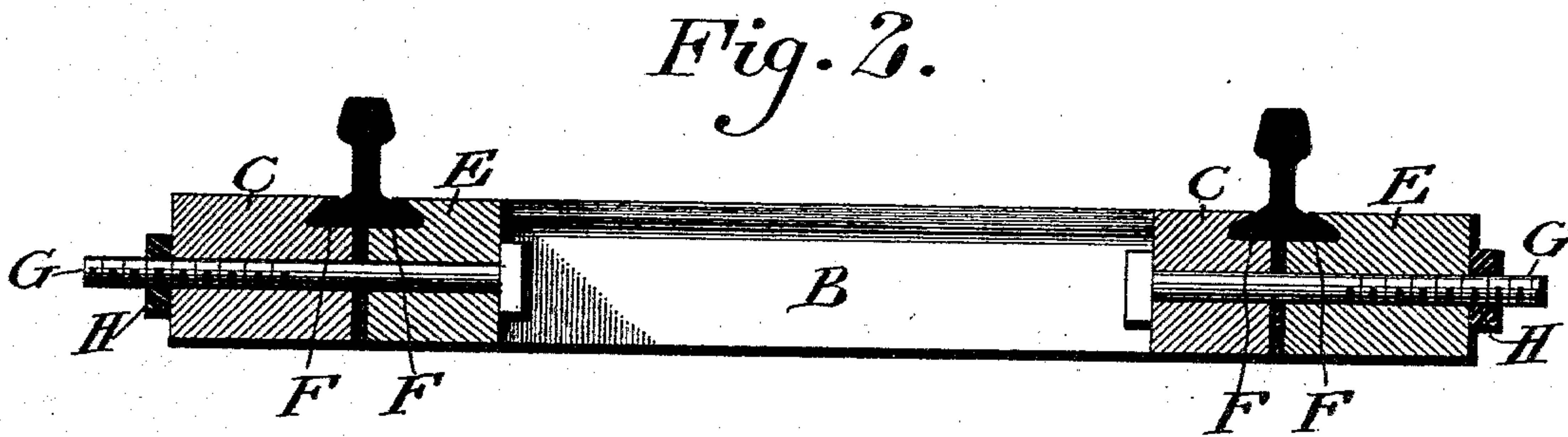
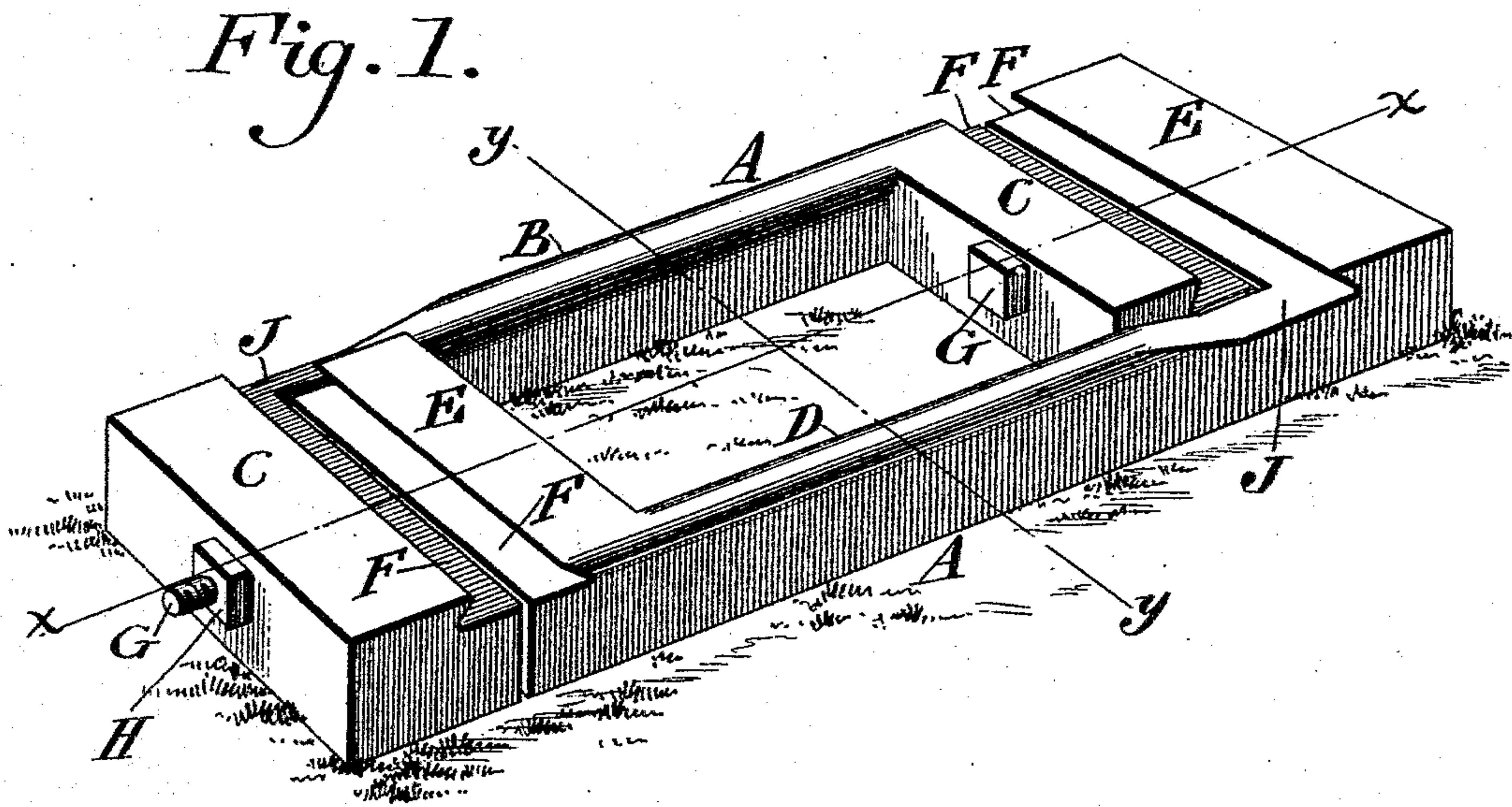


(No Model.)

A. C. PETZMAN.
RAILROAD TIE.

No. 515,551.

Patented Feb. 27, 1894.



WITNESSES:

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ADOLPH C. PETZMAN, OF PHILADELPHIA, PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 515,551, dated February 27, 1894.

Application filed July 21, 1893. Serial No. 481,103. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH C. PETZMAN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Railroad-Ties, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a railroad tie formed as herein described and claimed of two frames which may be separated in longitudinal direction to introduce and remove the rails, and which when closed serve to support the rails in a firm and substantial manner, the tie being also strong and durable in its nature.

Figure 1 represents a perspective view of a tie embodying my invention. Fig. 2 represents a longitudinal section thereof, on line x, x , of Fig. 1. Fig. 3 represents a transverse section thereof on line y, y , Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates two frames, one being composed of the side or longitudinal piece B, and the end or transverse pieces C, and the other composed of the side or longitudinal piece D, and the end or transverse pieces E, E. Each piece C of one frame is parallel with a piece E of the other frame, and in the upper faces of the adjacent pieces are recesses F, F, each corresponding to one-half of the width of the flange of a rail, so that the rails may be seated on the pieces C, E, in said recesses F, the upper walls of said recesses serving as cheek pieces to embrace said flanges.

G designates bolts which are passed through the pieces C and E, and are provided with nuts H for tightening purposes. It will be seen that when the nuts H are unscrewed or loosened, the pieces C and E separate, and the flanges of the rails may be properly seated or located, after which the bolts or nuts are screwed-up, whereby the pieces C and E close against the rails and tightly embrace the same, as will be seen in Fig. 2. When the nuts are again loosened, the rails may be removed when so required.

In order to permit the rails to be seated in the recesses at the ends of the latter next to the longitudinal side pieces B and C of the

frames, said pieces are cut-away opposite to said ends as at J, J, the rails thus being adapted to rest upon the bases of the recesses F, and upon said cut-away portions J, as said bases and portions are continuities of each other, and said portions uncover the ends of the recesses on the pieces C and E, so that the rails may be readily placed in said recesses, when said pieces are properly separated.

Each frame is virtually three-sided, so that when the parts are together they form a skeleton tie which is light, strong and durable, and leaves the center of the same open for purposes of ballasting, filling-in, &c. The outer transverse piece of each frame is longer than the adjacent inner piece of the other frame, so that said inner piece is wholly inclosed by said outer piece, and a rail rests in grooves on both pieces and the portion of the side piece B in line with said grooves.

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

1. A railroad tie formed of two frames, each consisting of a longitudinal piece having a transverse piece at each end thereof, one of said transverse pieces of each frame being longer than the other transverse piece of the same frame, and the contiguous transverse pieces of the frames having recesses for the rails, said parts being combined substantially as described.

2. A railroad tie formed of two frames, each consisting of a longitudinal piece and parallel transverse pieces at its ends of unequal length, where the longitudinal sides of the frame are separated, and the end of one frame incloses the end of the other, the opposite cross pieces having recesses for seating the rails, said parts being combined substantially as described.

3. A tie formed of recessed transverse pieces, and recessed longitudinal pieces connected therewith, the longitudinal pieces being cut away at the ends of the recesses of the transverse pieces, said parts being combined substantially as described.

ADOLPH C. PETZMAN.

Witnesses:

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