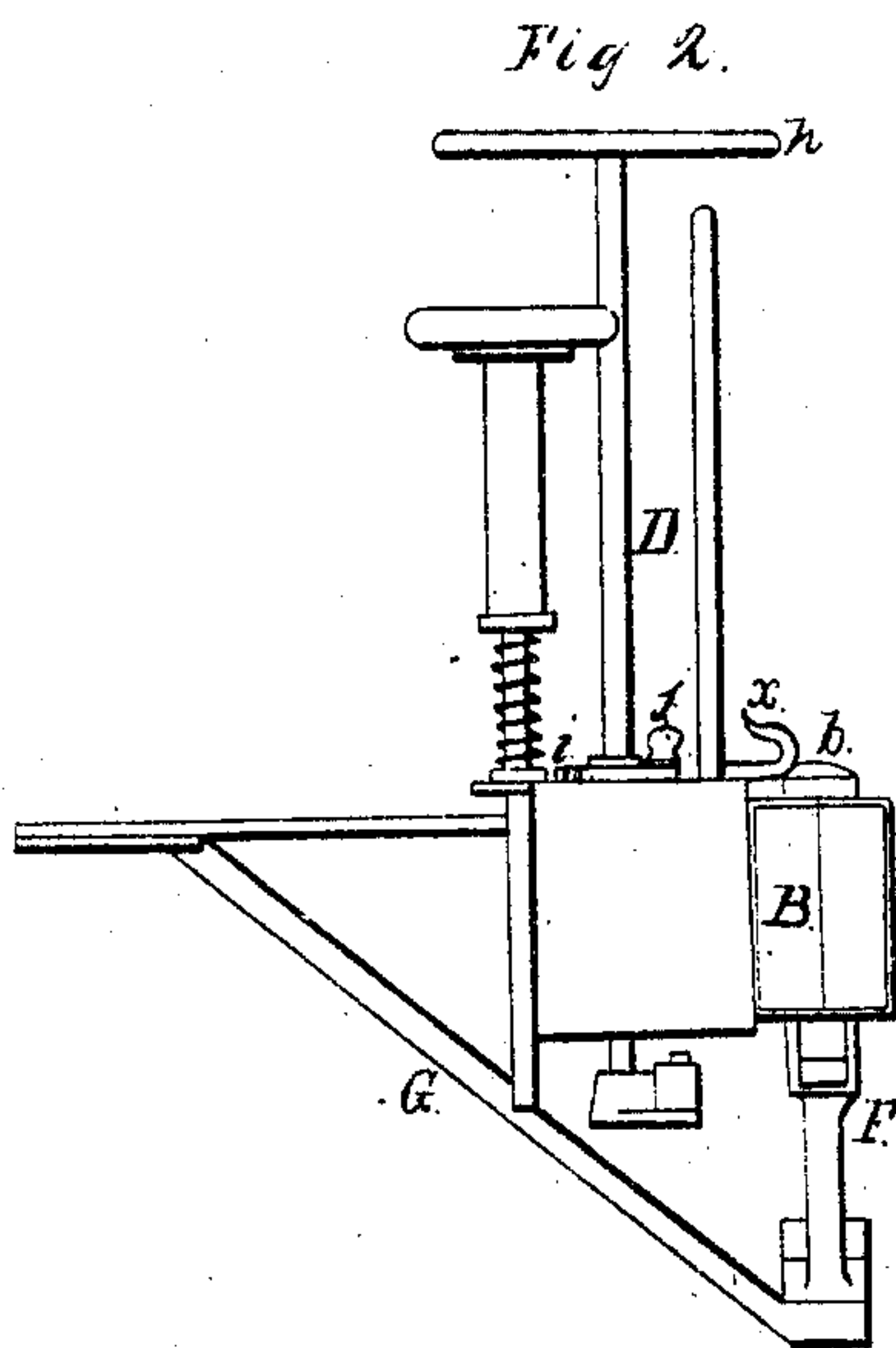
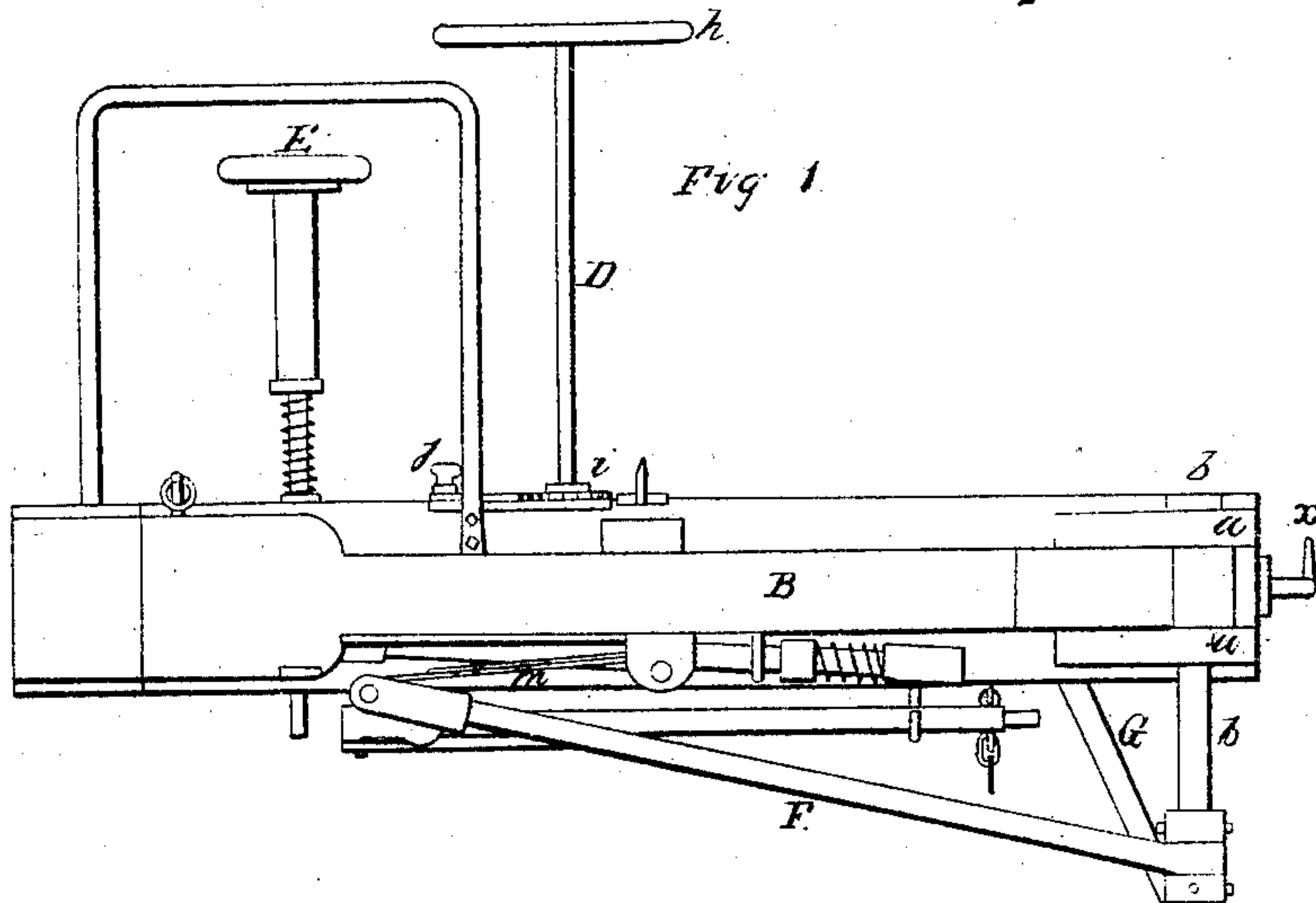


*J. E. Wootten & H. Hazel. Sheet 1, 2 Sheets.*

*Car Truck.*

*N<sup>o</sup> 63,600.*

*Patented Apr. 2, 1867.*



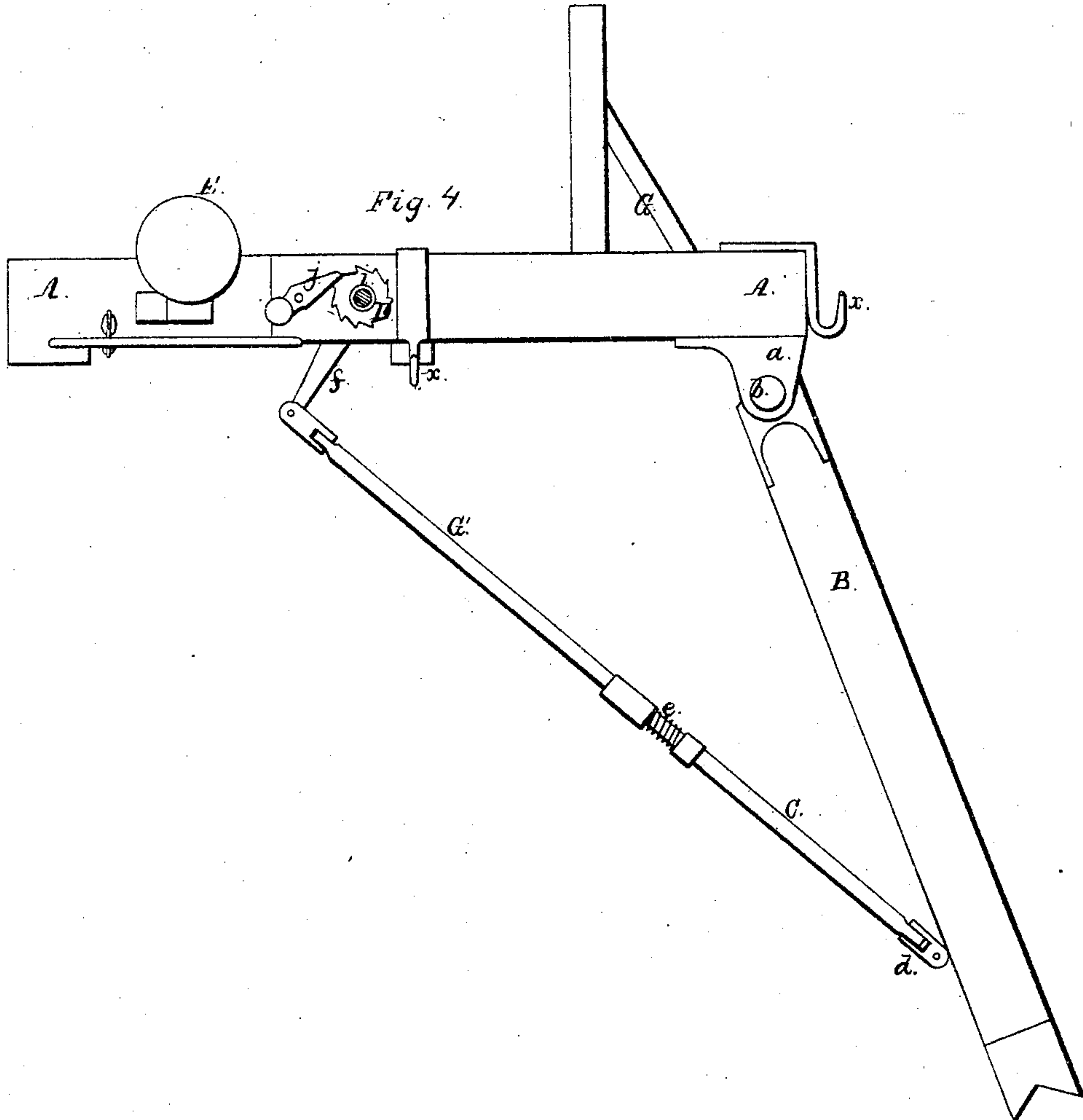
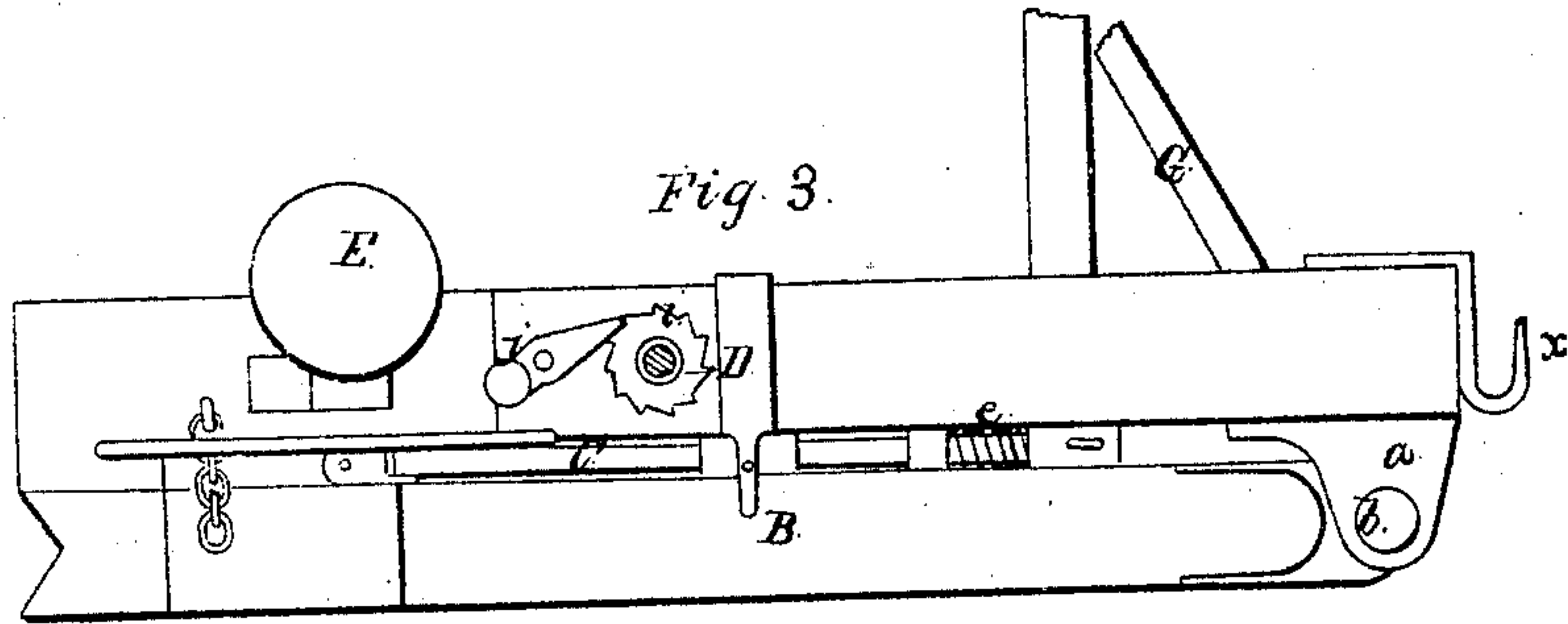
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*By their Atty*  
*H. Howson*

*J. E. Wootten & H. Hazel. Sheet 2, 2 Sheets.*

*Car Truck.*

*N<sup>o</sup> 63,600. Patented Apr. 2, 1867.*



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# United States Patent Office.

JOHN E. WOOTTEN AND HENRY HAZEL, OF CRESSONA, PENNSYLVANIA.

*Letters Patent No. 63,600, dated April 2, 1867.*

## IMPROVED LOCOMOTIVE ATTACHMENT.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known we, JOHN E. WOOTTEN and HENRY HAZEL, both of Cressona, Schuylkill county, Pennsylvania, have invented an Attachment for Locomotives; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

Our invention consists of a device, fully described hereafter, to be attached to a locomotive used in pushing cars along a track adjacent to that traversed by the locomotive.

In order to enable others to make and use our invention, we will now proceed to describe its construction and operation. On reference to the accompanying drawing, which forms a part of this specification—

Figure 1 represents an end view of part of a locomotive, with our improved ram and appliances connected therewith.

Figure 2, a side view of fig. 1; and

Figure 3, a plan view.

Similar letters refer to similar parts throughout the several views.

A represents the bumper-beam of a locomotive, and to the front, near one end of this beam, is secured a bracket, *a*, to which is hinged, by a pin, *b*, the beam B, which we denominate the "ram." To one side, near the outer end of this ram, a rod, C, is connected by a double joint, *d*, as best observed on reference to Figure 4, and this rod is connected to another rod, C', by a coupling, *e*, in such a manner that the two rods may be readily disconnected from each other. The outer end of the rod C' is jointed to a lever, *f*, secured to a vertical shaft, D, which turns in the bumper-beam B, and the upper end of which is furnished with a hand-wheel, *h*. To the vertical shaft is also secured a ratchet-wheel, *i*, to the teeth of which is adapted the point of a pawl, *j*, hinged to a pin on the top of the bumper-beam, and to the rear of the latter is connected a spring seat, E, for the operator. The pin *b*, by which the ram is jointed to the bumper-beam, is continued below the latter, and on the pin, near its lower end, turns one end of a brace, F, the upper end of which is jointed to a spring, *m*, secured to the under side of the ram B, near the outer end of the same. A brace, G, serves to connect the lower end of the pin *b* to the frame or other permanent part of the locomotive.

At railroad stations, where there are several tracks, turnouts, switches, and frogs, it is usual to employ a locomotive for the especial purpose of transferring cars from one track to another, different appliances being used in connection with the locomotive for pushing and pulling the cars. In using our invention, the operator occupies the seat E, the wheel *h* being within reach of his hands, and the pawl *j* within reach of his foot, so that the position and retention of the ram B are under his control. Supposing it be necessary to use the locomotive traversing one track to push a car or cars along an adjacent track or turnout, the operator, by means of the hand-wheel *h*, turns the ram outwards, as shown in fig. 4, until the outer forked end of the ram is in position to be brought in contact with the bumper-beam or other permanent part of the car to be pushed; he then secures the ram in this position by pushing the pawl *j* into gear with the ratchet-wheel *i*, and the locomotive, continuing its course along one track, will push the car along the other. When the use of the ram is not required, the rods C and C' are disconnected from each other, the former being folded against the ram and connected to a hook, and the rod C' being folded beneath the bumper-beam, and connected to a hook or hooks on the same, after which the ram itself is folded against the bumper-beam, and connected thereto by any suitable appliances. The hook *x*, at one end of the bumper-beam, is brought into use when cars have to be drawn along a track adjacent to that traversed by the locomotive, the hook receiving the rope or chain connected to the car. As the ram is subjected to somewhat violent shocks, it is important that the latter should not be transferred in their full force either to the rods C C', and appliances for operating the same, or to the brace F. The latter is relieved from the violence of the shocks by connecting it to the spring *m* secured to the ram, instead of directly to the same, and the rods C and C' being connected together by a yielding coupling, the violence of the shock is in a measure absorbed. This coupling is made by a tube, secured by a detachable pin to the rod C', and arranged to slide on the rod C, the latter having a collar between which and the coupling intervenes a spiral spring.

We claim as our invention, and desire to secure by Letters Patent—

1. The ram B, hinged to the bumper-beam of a locomotive, and arranged to operate substantially as and for the purpose herein set forth.
  2. The combination of the ram B, connecting-rods C C', lever f, and vertical shaft D, the whole being arranged on a locomotive, substantially in the manner and for the purpose described.
  3. The said connecting-rod, made in two parts, and connected together by a yielding coupling, all as set forth.
  4. The combination of the ram B and brace F with the pin b, by which the said ram is hinged to the locomotive.
- In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

Witnesses:

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CHAS. U. DENGLE.

J. E. WOOTTEN.  
H. HAZEL.