

(No Model.)

G. H. CLARK.

TOP ROLL SADDLE FOR SPINNING MACHINES.

No. 345,831.

Patented July 20, 1886.

Fig. 1.

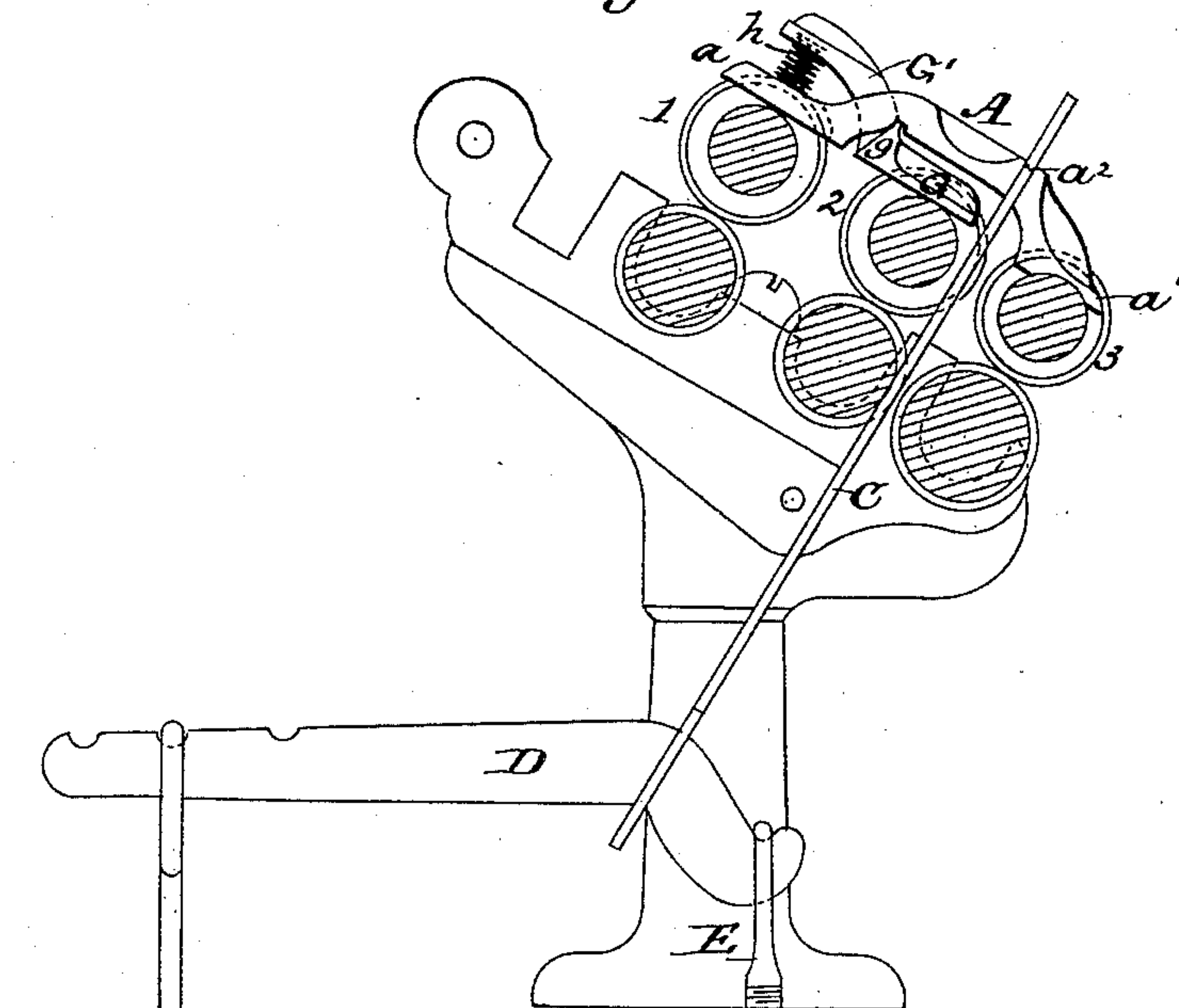


Fig. 2.

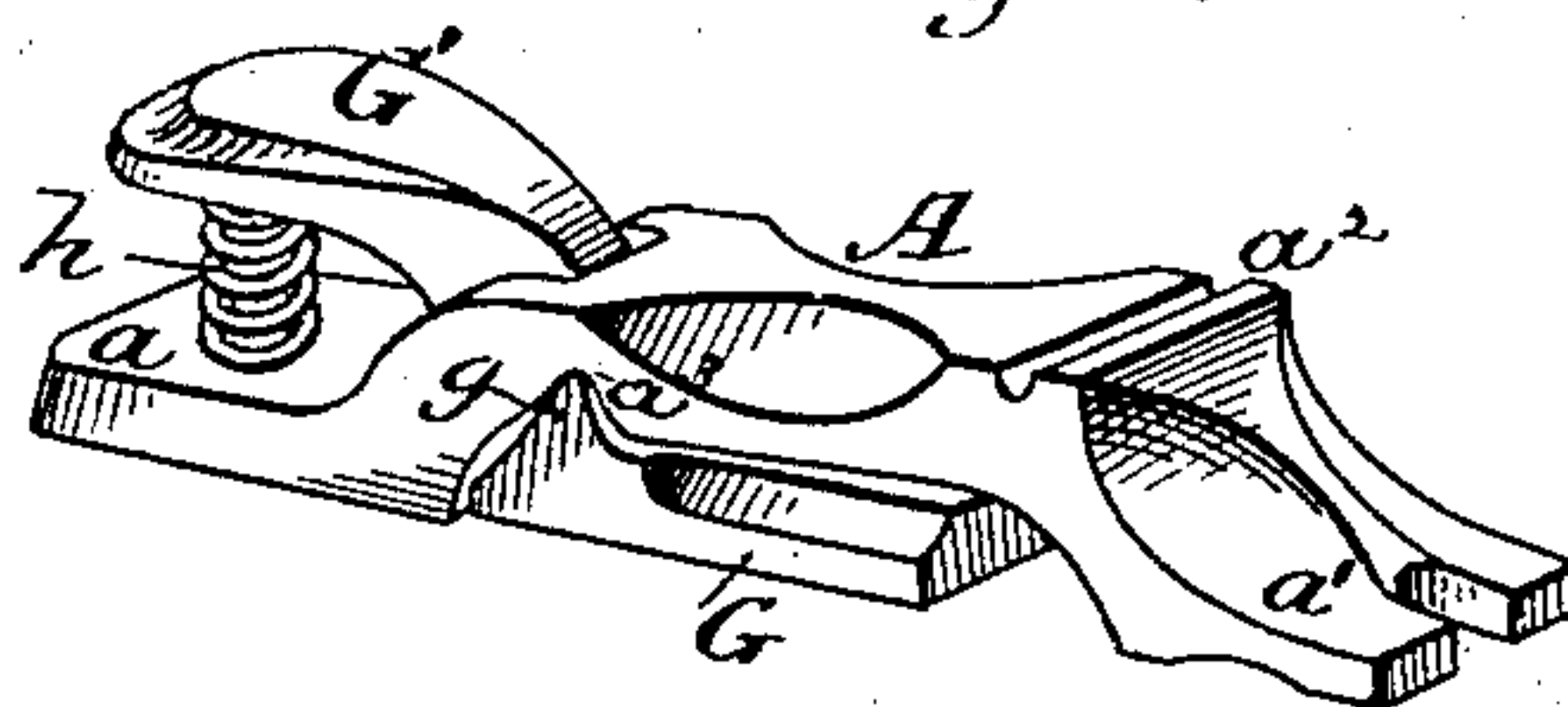
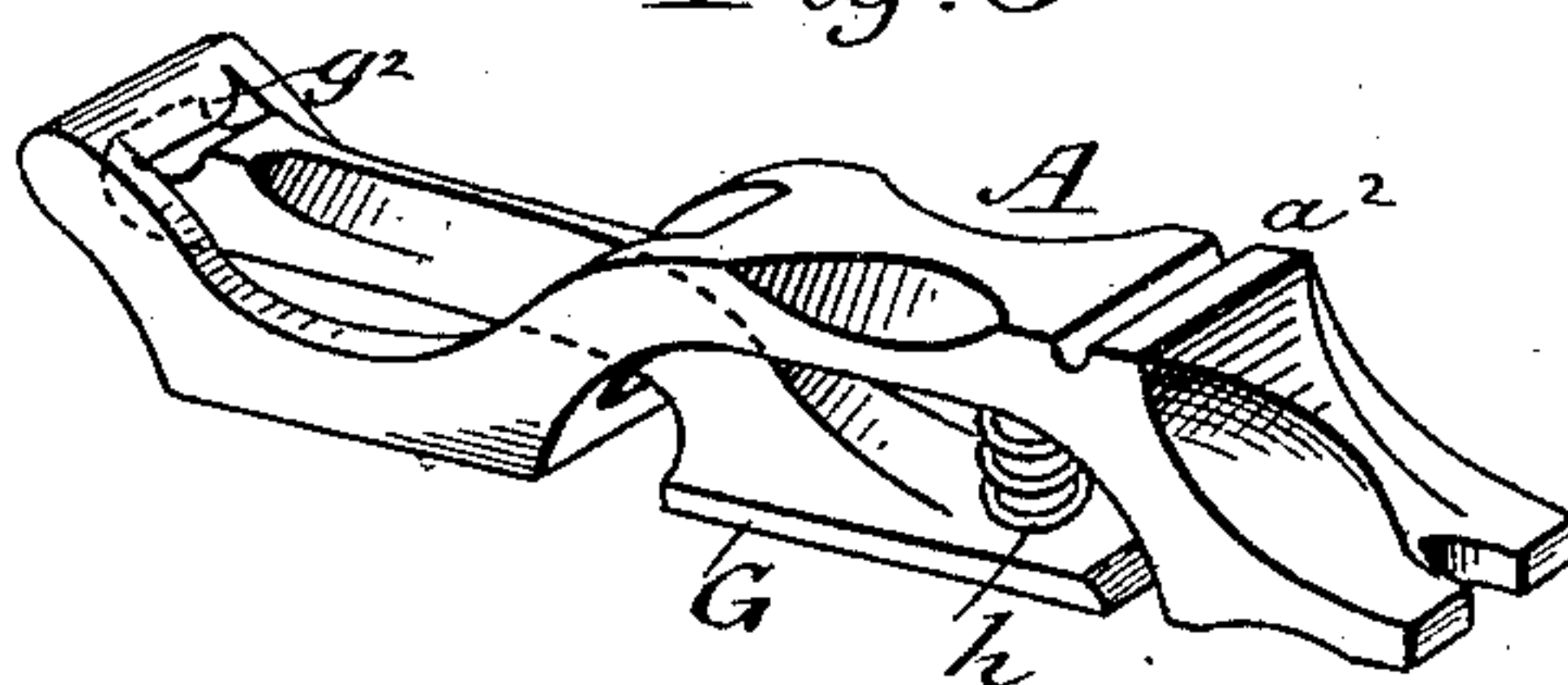


Fig. 3.



Witnesses:

L. B. Still

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att'y.

UNITED STATES PATENT OFFICE.

GEORGE H. CLARK, OF NEWBURYPORT, ASSIGNOR TO THE WHITIN MACHINE WORKS, OF WHITINSVILLE, MASSACHUSETTS.

TOP-ROLL SADDLE FOR SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 345,831, dated July 20, 1886.

Application filed October 8, 1883. Serial No. 108,434. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CLARK, a citizen of the United States, residing at Newburyport, in the county of Essex and State of Massachusetts have invented certain new and useful Improvements in Top-Roll Saddles for Spinning-Machines, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a vertical transverse section of drawing-rolls with the supporting-frame, the saddle, the stirrup, the retaining-lever, and weight in side view. Fig. 2 is a perspective view of the saddle. Fig. 3 is a modification of the saddle, represented also in perspective.

My invention relates to spinning-machine top-roll saddles in which the bearing for the middle roll is made yielding in the form of a sheet-metal spring having one end rigidly secured to the saddle; and the objects of my improvements are to form a pressure-transmitting bearing for the middle roll, of non-elastic metal, of such form that the slight vertical motion transmitted to the saddle bearing upon the first and third roll by any inequalities in their surface will not be communicated sensibly to the middle bearing. I attain this object by the construction illustrated in the accompanying drawings, in which—

A represents the body of the saddle, the end a of which is designed to rest upon the back roll, 1, and the end a' to rest upon the front roll, 3. The upper surface of the saddle is notched transversely at a'' to receive one end of the stirrup C, that is connected in the usual manner with the hooked lever D, and the latter is retained at one end by the fulcrum-screw E, and carries at the other end the weight F. The under side of the saddle is hollowed out or arched to provide room for the independent bearing G, resting on the middle roll, 2. This bearing G is in the form of a lever of the first order having a knife-edge fulcrum, g , resting in a transverse groove, a^3 , formed in the arched portion of the saddle A, and the latter is slotted longitudinally for the passage of the end G' of the bearing-lever G, and to provide

an easy pressure upon the middle roll, a coiled spring, h , is placed between the end G' of the lever G and the top of the saddle, as shown in Figs. 1 and 2.

The saddle A and the lever-bearing G are each one formed of metal cast in suitable molds and requiring very little fitting to become properly united and produce bearings of great durability for the rolls of a spinning-machine.

In the modification shown in Fig. 3 the outer end of the lever G is pivoted to the saddle at g^2 under a transverse journal formed upon one end of the saddle, and the coiled spring h is located between the inner end of the lever and the arched under surface of the saddle; but I prefer the construction first described and shown in Figs. 1 and 2 as being less costly. In either case the spring h is retained in position by forming a cavity in the saddle or its lever, to receive one end of said spring, or by means of a short pin projecting from either one of these pieces into one end of the spring.

Having now fully described my invention, I claim—

1. As a new article of manufacture, a saddle for spinning-machine rolls, consisting of the longitudinally slotted and arched metal casting A, a non-elastic lever-bearing pivoted to and passing through the slot in said casting, and a coiled spring located between said lever-bearing and the casting A, substantially as and for the purpose described.

2. The combination of the arched and longitudinally-slotted metal saddle A, the lever-bearing pivoted to and passing through the slot in said saddle, and the coiled spring h , between the latter and the lever-bearing, with the drawing-rolls of a spinning-machine, and means for keeping the saddle upon said rolls, substantially as described.

In testimony whereof I affix my signatures in presence of two witnesses.

GEORGE H. CLARK.

Witnesses:

GUSTAVUS E. TAFT,
HENRY HEWITT.