## J. BUTCHER & J. L. THOMAS. GUARD RAIL CLAMP. APPLICATION FILED JULY 21, 1905.

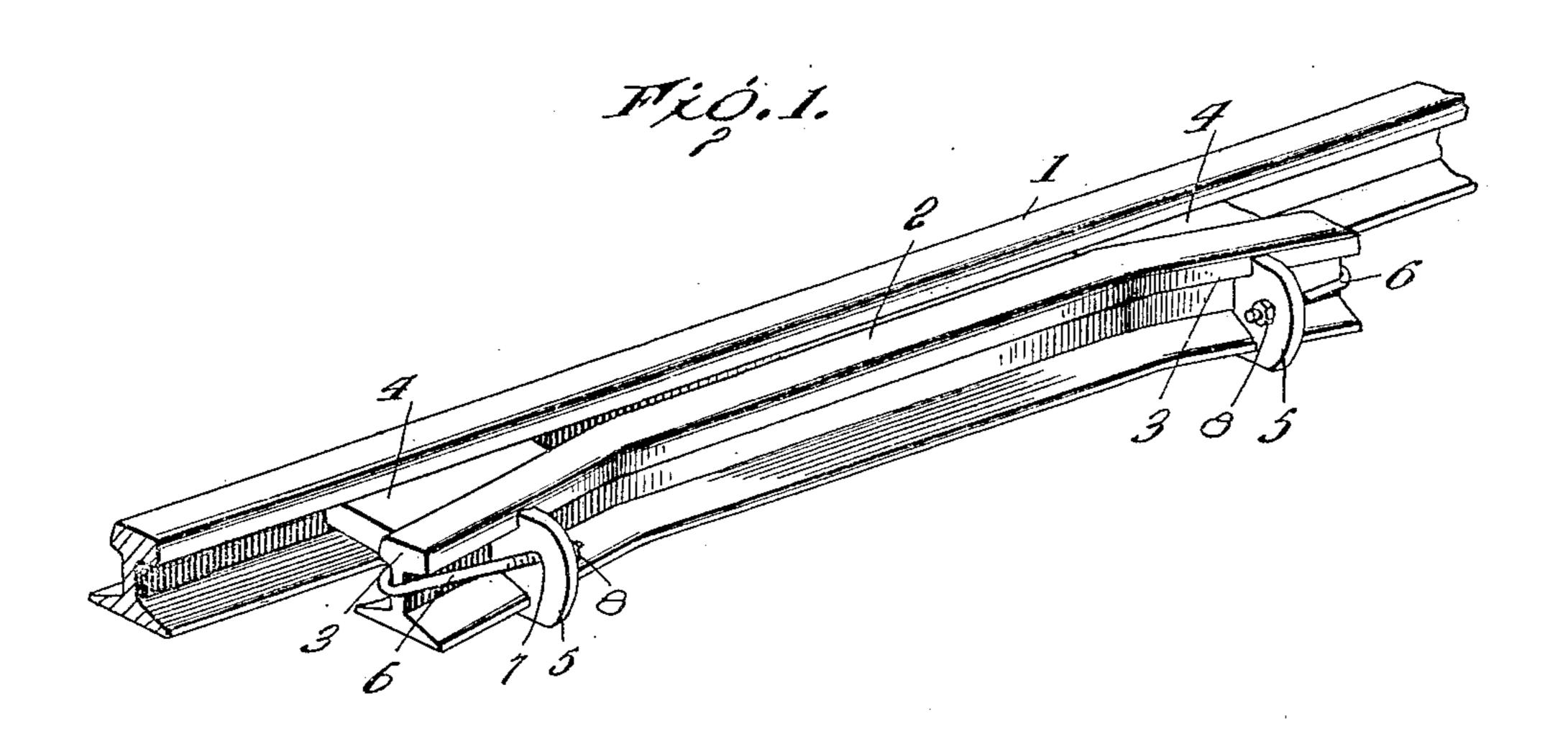
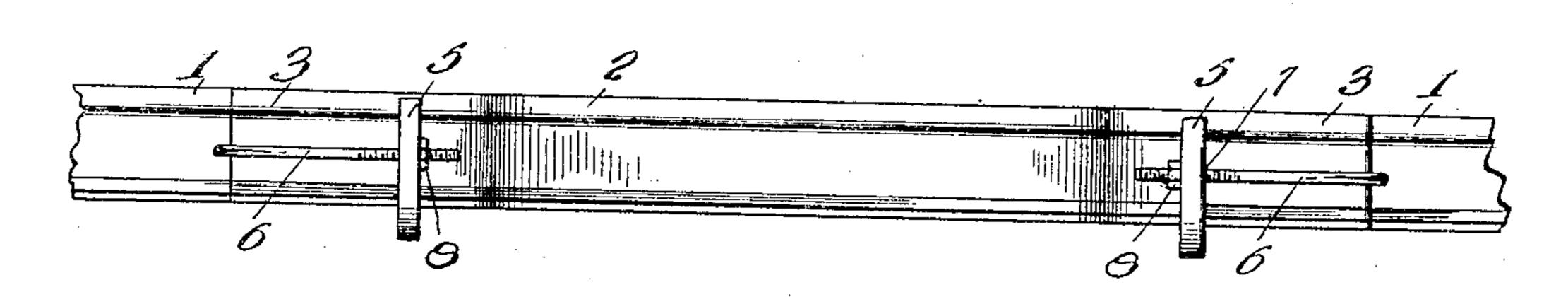
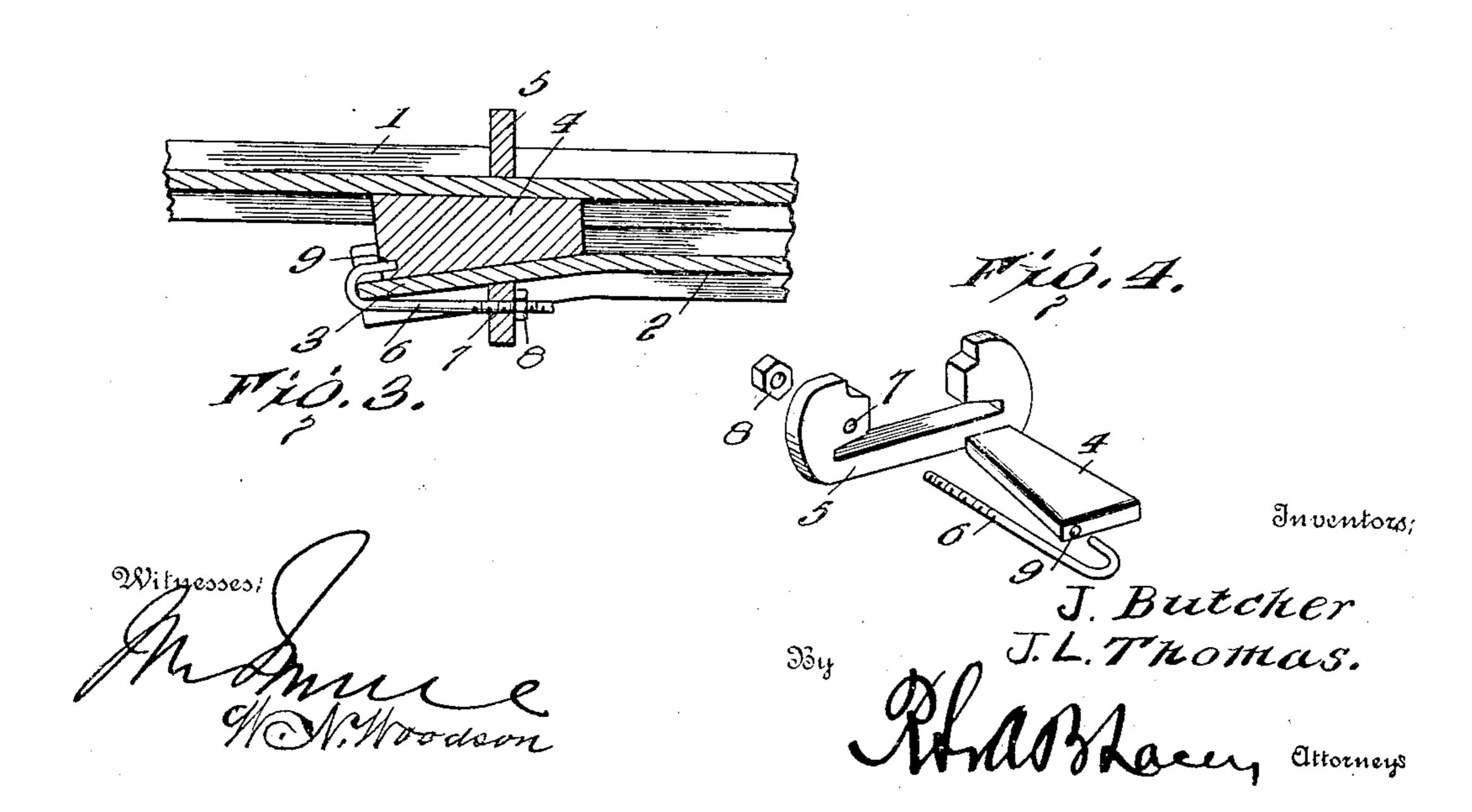


Fig. 2.





## UNITED STATES PATENT OFFICE.

JASPER BUTCHER AND JAMES L. THOMAS, OF GAINESVILLE, TEXAS; SAID THOMAS ASSIGNOR OF ONE-THIRD OF HIS RIGHT TO SAID BUTCHER.

## GUARD-RAIL CLAMP.

No. 805,627.

Specification of Letters Patent.

Patented Nov. 28, 1905.

The numeral 1 designates the main rail of 55

Application filed July 21, 1905. Serial No. 270,732.

To all whom it may concern:

Be it known that we, Jasper Butcher and James L. Thomas, citizens of the United States, residing at Gainesville, in the county 5 of Cooke and State of Texas, have invented certain new and useful Improvements in Guard-Rail Clamps, of which the following is a specification.

In the construction of railroad-tracks it is 10 frequently found necessary to employ guardrails, as at bridge-approaches and opposite to

frog-points.

This invention relates to improvements in that class of fasteners employed for securing 15 the guard-rails to the main rails of the track, and has for its object to produce a device of this character by the employment of which the guard-rail can be easily and quickly secured to the main rail at any point without the 20 necessity of weakening the construction by drilling bolt-holes.

It consists, essentially, of angular fillingblocks between the outturned ends of the parts tightly in position. The free ends of guard-rail and the main rail, a clamping mem-25 ber extending beneath the rails and embracing the outer sides thereof, and means for forcing the clamping member into engagement with the outturned ends of the guard-rail in order to clamp the various parts in operative

30 position.

A further object is to construct a guard-rail fastener which will be simple and durable in construction and which will readily permit the various parts to be tightened up should they 35 become worn and work loose.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to 40 be had to the following description and ac-

companying drawings, in which—

Figure 1 is a perspective view showing a guard-rail attached to a main rail by means of our device. Fig. 2 is a side view of a guard-45 rail clamped in position by our device. Fig. 3 is a horizontal sectional view showing the filling-block as extending entirely to the end of the guard-rail. Fig. 4 is a detail perspective view of the clamping member, filling-50 block, and hook-bolt.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

mit turning of the rails. is claimed as new is—

the track, and 2 the guard-rail, the ends of which are bent outwardly at 3. Filling-blocks 4, which are approximately triangular in shape, are placed between the web of the outwardly-turned portions of the guard-rail and 6c the web of the main rail. Clamping members 5 extend beneath the two rails and have their ends bent upwardly, so as to embrace the outer sides of the said rails. The upturned ends of the clamping members extend nearly to the 65 top of the rails and are so made as to conform to the shape of the rails. A strong connection is thus made possible, and any tendency of the rails to turn will be prevented. Hook-bolts 6 hook around the web portion at the end of 70 the guard-rail, while the threaded portions extend through openings 7 in the clamping members 5 and cooperate with nuts 8 to enable said clamping members to be forced into engagement with the outturned ends of 75 the guard-rail in order to clamp the various the hooks on the hook-bolts 6 engage with the filling-blocks 4 and prevent same from slipping out of position. Should it be found de- 80 sirable to have the filling-blocks 4 extend entirely to the end of the guard-rail, this may be accomplished by forming recesses 9 in the ends of the filling-blocks for the reception of the hook ends.

In order to attach the guard-rail, it is simply necessary to place the same alongside the main rail of the track and place the clamping members and filling-blocks in position. The various members can thus be tightly clamped 90 together by screwing up the nuts 8 and forcing the clamping members into engagement with the outturned ends of the guard-rail. It will thus be understood that I have invented a device for securing guard-rails to the main 95 rail of the tracks, which can be very quickly applied and which will not work loose or per-

Having thus described the invention, what

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1. In a device of the character described the combination of the main rail of a track, a guard-rail the ends of which are bent outwardly, filling-blocks between the two rails, clamping members extending beneath the 105 rails and having their ends bent upward to embrace the outer sides of the rails, and means for holding the clamping members in

engagement with the outturned ends of the guard-rail in order to clamp the various parts

securely in position.

2. In a device of the character described the combination of the main rail of a track, a guard-rail the ends of which are bent outwardly, filling-blocks between the two rails, clamping members extending beneath the rails and having their ends bent upwardly to embrace the outer sides of the rails, and hookbolts adapted to hook around the ends of the guard-rail and coöperating with the clamping members in order to force the same into engagement with the outturned ends of the guard-rail and clamping the various members securely in position.

3. In a device of the character described the combination of the main rail of a track, a guard-rail the ends of which are bent out-

wardly, angular filling-blocks fitting between 20 the outturned ends of the guard-rail and the main rail, clamping members extending beneath the two rails and having their ends bent upward to embrace the outer sides of the rails, and hook-bolts which hook around 25 the ends of the guard-rail and coöperate with the clamping members in order to force the same into engagement with the outturned ends of the guard-rail, the free end of the hook engaging with the filling-block to pre-30 vent the same from slipping out of position.

In testimony whereof we affix our signatures

in presence of two witnesses.

JASPER BUTCHER. [L. s.]
JAMES L. THOMAS. [L. s.]

Witnesses:

HARRY L. STUART, ARVAD R. BUTCHER.