(No Model.)

# J. E. NAUDAIN.

## MUTE FOR VIOLINS.

No. 578,895. Patented Mar. 16, 1897.

*Fig 1.*

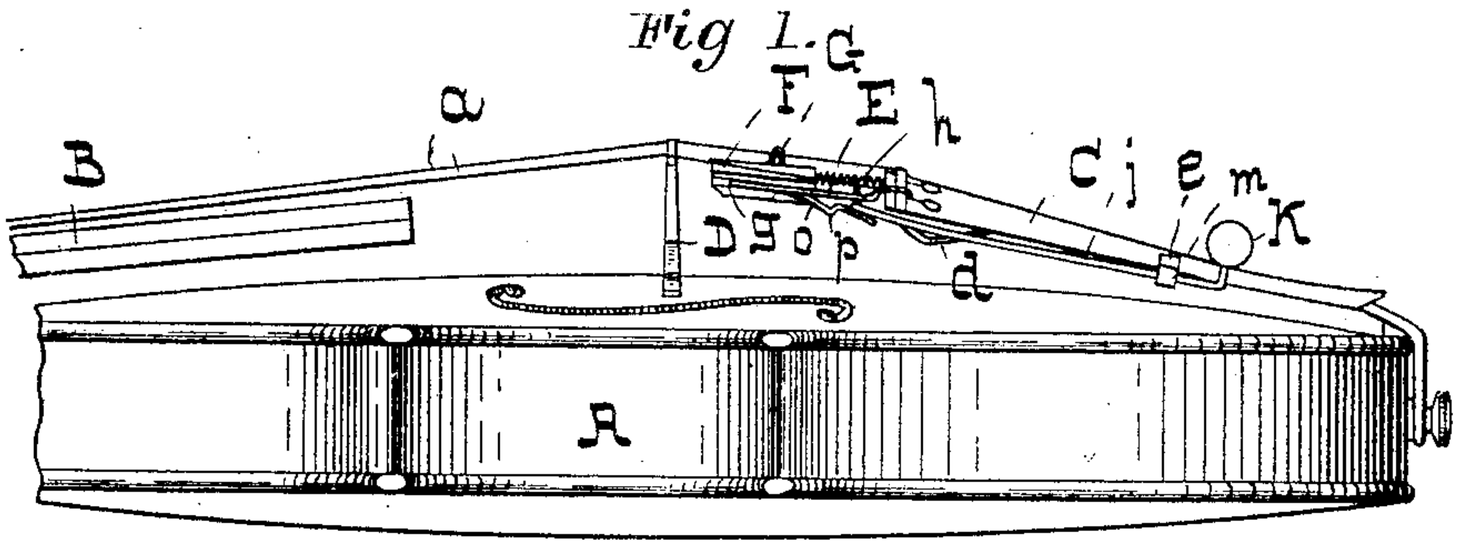



*Fig 2.*

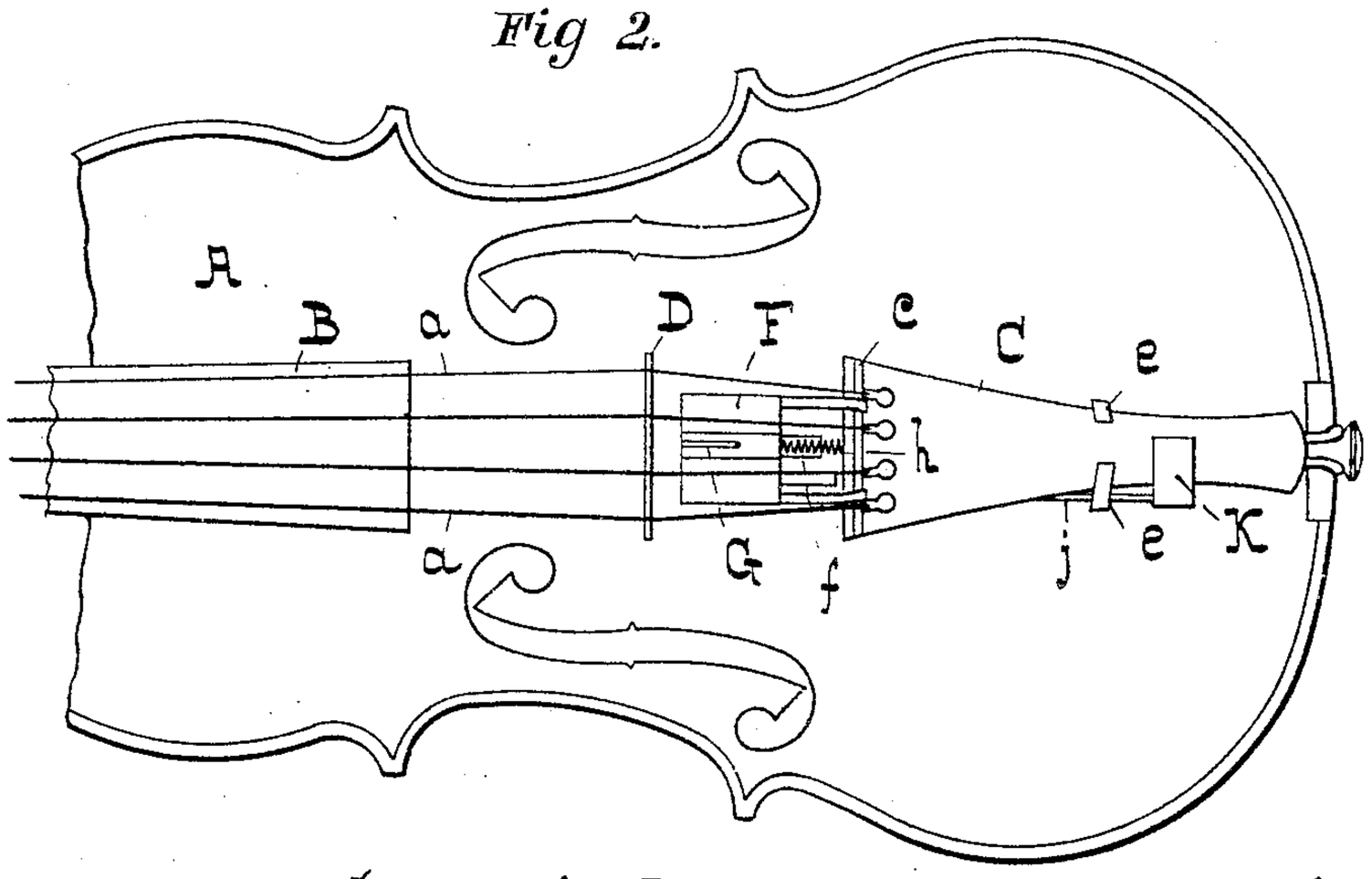



*Fig 3*

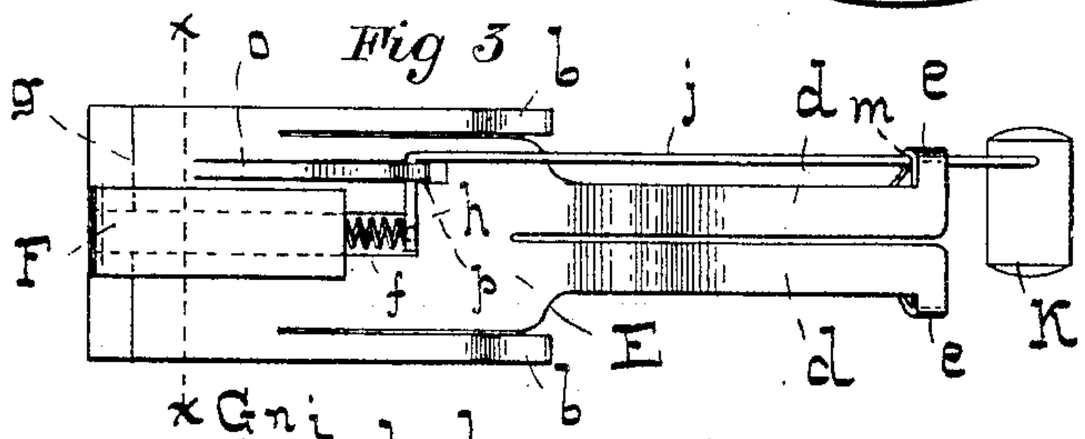



*Fig 5.*

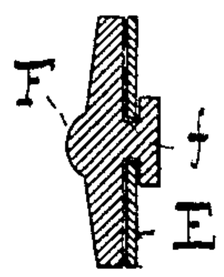
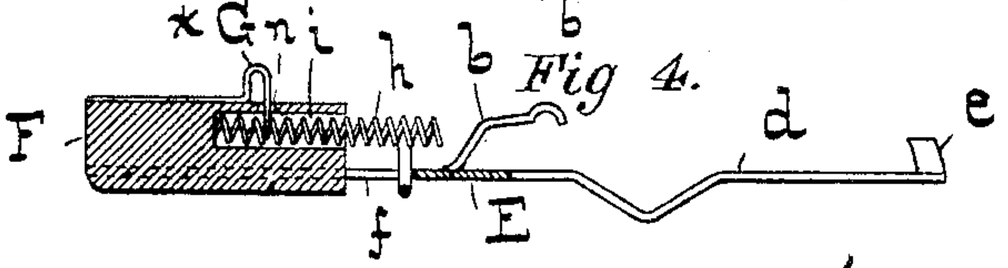



*Fig 4.*

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# UNITED STATES PATENT OFFICE.

JOHN ELIAS NAUDAIN, OF BALTIMORE, MARYLAND.

## MUTE FOR VIOLINS.

SPECIFICATION forming part of Letters Patent No. 578,895, dated March 16, 1897.

Application filed June 29, 1896. Serial No. 597,280. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ELIAS NAUDAIN, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Mutes for Violins, of which the following is a specification.

In the description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is an exterior side view of a portion of a violin provided with the improved mute, which is shown as withdrawn from the bridge. Fig. 2 is a top view of Fig. 1. Fig. 3 is an enlarged under side view of the mute and certain of its attachments. Fig. 4 is a central longitudinal section of Fig. 3. Fig. 5 is a cross-section of Fig. 3, taken on the dotted line *x x*.

Referring now to the drawings, A is the body of the violin; B, the finger-board; C, the tailpiece; D, the bridge, and *a a* are the strings.

E is the plate to carry the mute hereinafter described fastened to the tailpiece C. To admit of the fastening, the plate E is slitted near its edges, and the strips *b* thereby formed are bent at their ends so as to hook over the bead *c* on the upper side of the tailpiece. The said plate is also slitted centrally thereof to form the separated extensions *d*, which have hooks *e* to clamp the portion of the tailpiece between them. By the connection of the plate E to the tailpiece, as described, it is securely fastened.

F is the mute, consisting of a piece of lead or other suitable material which is applied to and adapted to slide longitudinally of the plate E. To admit of the attachment of the mute to the plate E, the latter is provided with a slot *f*, which extends to its inner edge *g*, and the mute is grooved at its edges, as shown in Fig. 5, which is a cross-section of Fig. 3, so that it will fit the said slot.

To move the mute F longitudinally of the plate E and bring its end against or away from the bridge D, it is provided with a spring *h*, which fits in a cavity *i*, and a bar *j*, with one end soldered to the spring and the other fitted with a knob K.

It will be seen that the inner end of the bar *j* is bent at a right angle, so as to bring the portion of the bar to which the knob K is secured to one side of the tailpiece C. It is guided at the knob end by an eye *m*, formed in one of the hooks *e* of the plate E.

G is a wire latch the end of which is secured to the mute and the other bent so as to pass through a hole *n* in the mute and through the spring *h*. By this arrangement the length of the portion of the spring which projects beyond the mute may be altered.

From the foregoing description it will be understood that by moving the knob K the mute F may be forced against or withdrawn from the bridge D, and that the spring *h* serves to keep the mute against the bridge with some tension and also makes it unnecessary to move the mute any exact distance.

To lock the mute against the bridge, the plate E has a tongue *o* stamped out, and the end of the tongue is provided with a hook *p*, into which the bent portion of the bar *j* enters when the mute is forced against the bridge.

The knob K is moved so as to apply the mute or take it off by means of the chin of the player.

I claim as my invention—

In combination with a violin, having a bridge and a tailpiece for the strings, of a plate attached to the tailpiece, a mute adapted to slide longitudinally of the said plate, a moving device attached to the mute by means of a compressible connection, and a locking mechanism whereby when the mute is pushed against the bridge it is held thereat with some pressure, substantially as specified.

JOIIN ELIAS NAUDAIN.

Witnesses:

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DANL. FISHER.