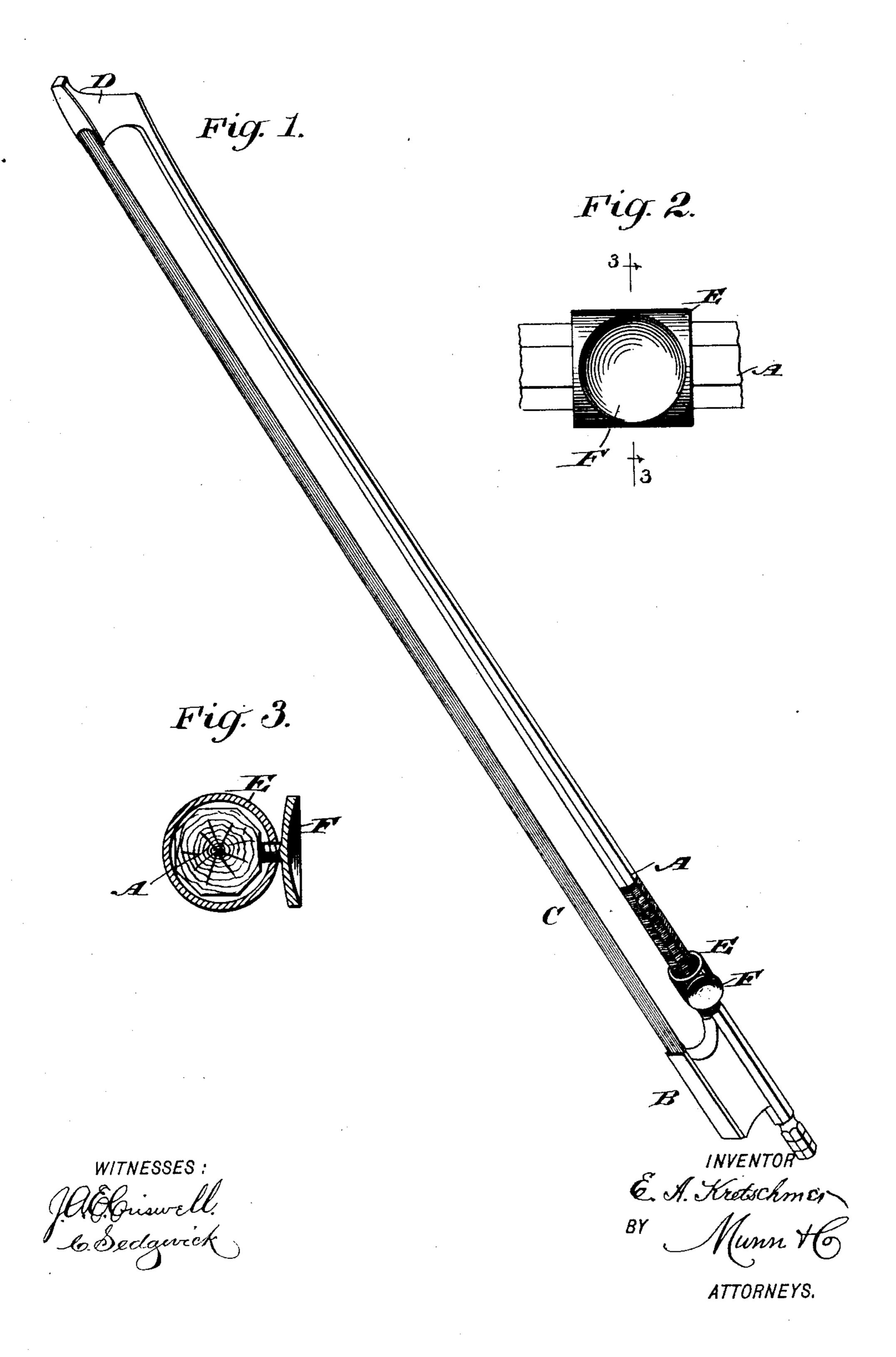
(No Model.)

## E. A. KRETSCHMER.

BOW FOR STRINGED MUSICAL INSTRUMENTS.

No. 482,255.

Patented Sept. 6, 1892.



## IJNITED STATES PATENT OFFICE.

EMIL A. KRETSCHMER, OF HORICON, WISCONSIN.

## BOW FOR STRINGED MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 482,255, dated September 6, 1892.

Application filed May 21, 1892. Serial No. 433,842. (No model.)

To all whom it may concern:

Be it known that I, EMIL A. KRETSCHMER, of Horicon, in the county of Dodge and State of Wisconsin, have invented a new and Im-5 proved Bow for Stringed Musical Instruments, of which the following is a full, clear, and ex-

act description.

The object of the invention is to provide a new and improved bow for violins and other to stringed musical instruments which is simple and durable in construction and arranged to enable the player, especially a beginner, to hold the bow in a correct, graceful, and easy position without danger of the bow slipping 15 in the hand and without fatigue while playing for a considerable length of time.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter described, and then pointed

20 out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement. Fig. 2 is an enlarged side elevation of part of the same, and Fig. 3 is a transverse section of the same on the line 3 3 of

Fig. 2.

The improved bow for stringed musical instruments is provided with the usual staff A, on one end of which is held adjustably the frog B, connected by the hair C with the head D in the usual manner. On the staff A, next 35 to the frog B, is held loosely a ferrule or ring E, in which screws a set-screw F, engaging the staff A, so as to hold the ferrule E in place in any desired position on the staff A. The I

head of the set-screw F is recessed on its outer face, so as to form a convenient resting- 40 place for the thumb of the hand holding the bow. It will be seen that by means of the set-screw F the ring can be shifted on the staff, so that the head of the set-screw comes into the proper position for the player to en- 45 gage the dished part with his thumb to permit or enable the player to correctly, gracefully, and easily hold the bow in the proper position while playing. It will be seen that the ferrule or ring E forms a convenient 50 means for adjusting the set-screw F on the staff A, which forms the resting-place for the thumb-screw, the said set-screw also having the function to lock the ferrule in place after the latter has been set on the staff A to bring 55 the set-screw head in the proper position.

Having thus fully described my invention, I claim as new and desire to secure by Letters

Patent—

1. An attachment for bows for stringed in- 60 struments, comprising a slide and a screw extending through the slide to secure it in proper position on the bow and provided with a concave head forming a thumb-piece, substantially as set forth.

2. The combination, with the bow, of the slide mounted on the bow-staff and having a transverse threaded aperture and a screw extending through the aperture into contact with the bow-staff and provided with a head 70 having a concave outer face to receive the end of the thumb, substantially as set forth.

EMIL A. KRETSCHMER.

Witnesses:

J. Ed. Sawyer, F. W. MENKEY.