

(No Model.)

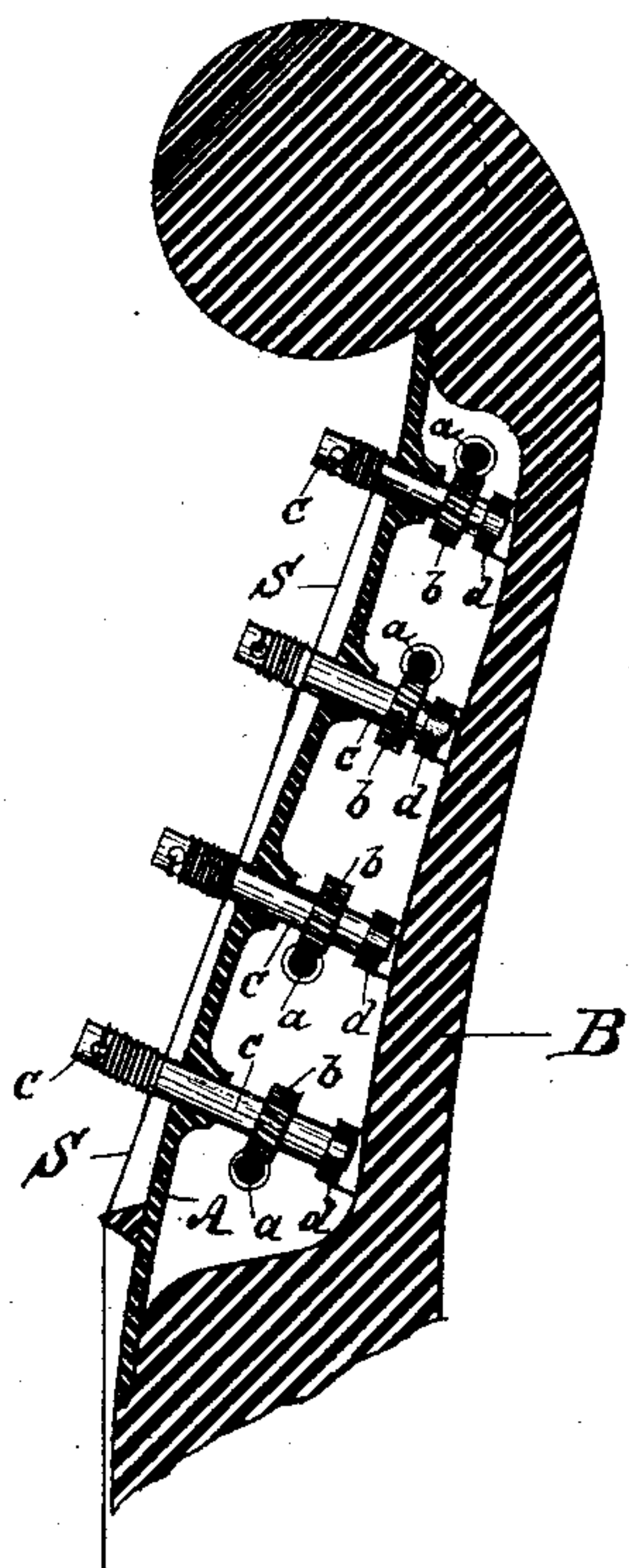
J. PRENZEL.

VIOLIN.

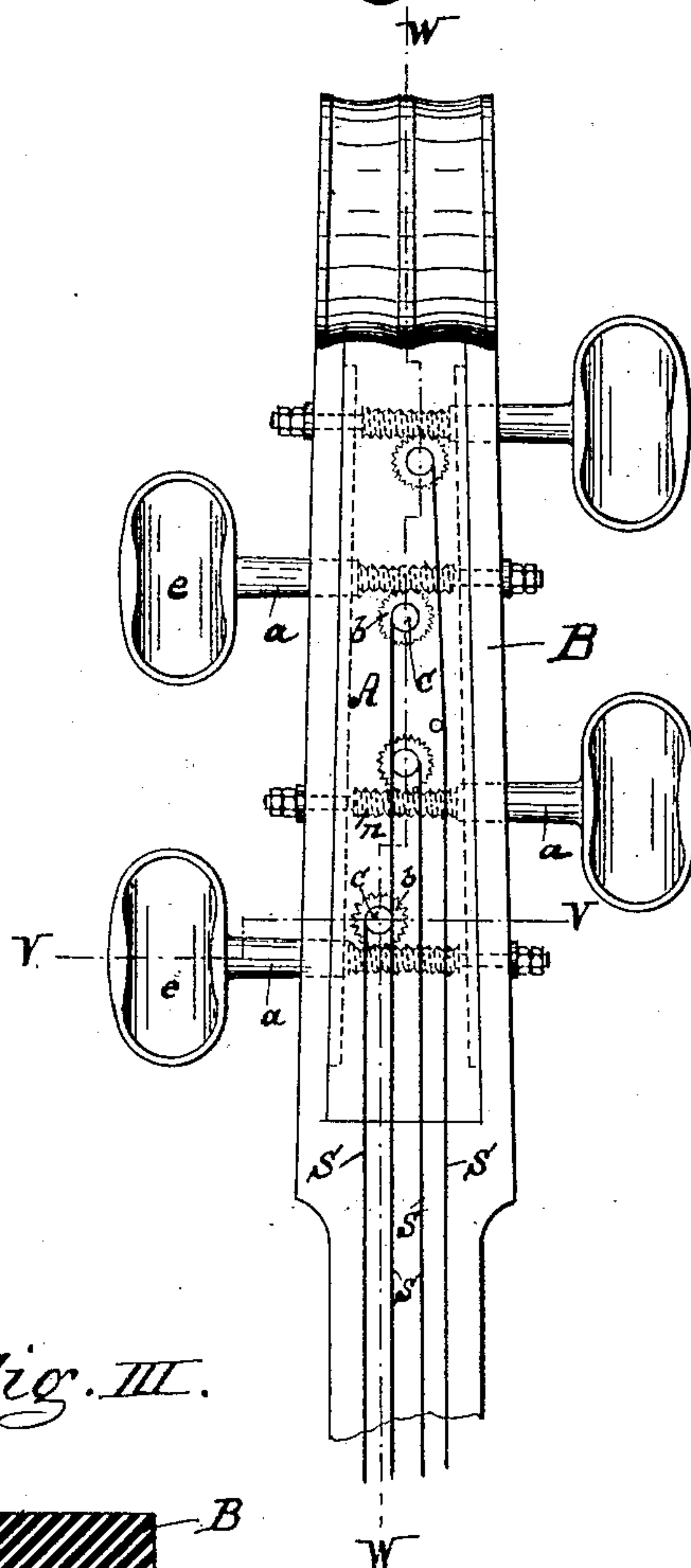
No. 316,658.

Patented Apr. 28, 1885.

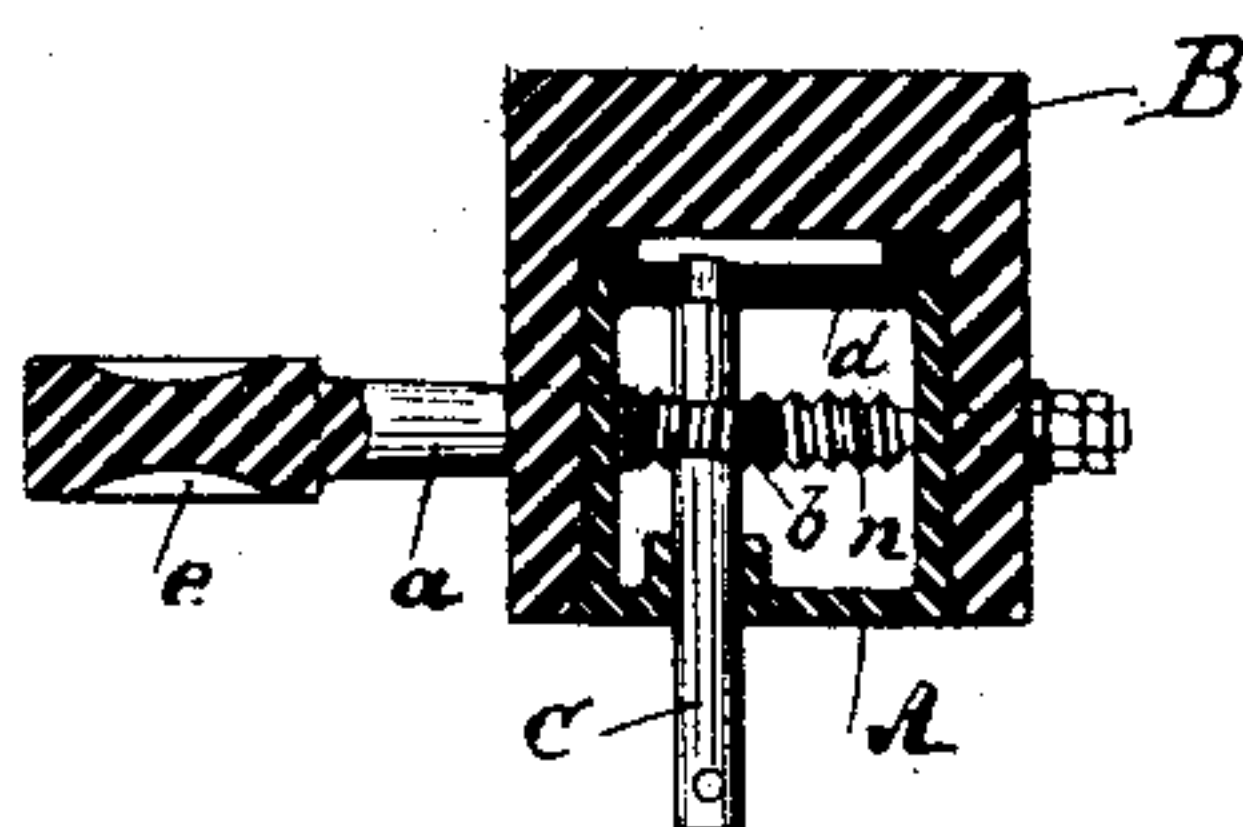
*Fig. I.*



*Fig. II.*



*Fig. III.*



Witnesses.  
C. L. Green  
Chas. L. Moulle

Invenlor.  
Joseph Preuzel  
per Henry E. Roeder  
Attorney.

# UNITED STATES PATENT OFFICE.

JOSEPH PRENZEL, OF HIRSCHBERG. GERMANY.

## VIOLIN.

**SPECIFICATION** forming part of Letters Patent No. 316,658, dated April 28, 1885.

Application filed September 19, 1884. (No model.) Patented in Germany August 7, 1881, No. 17,413, and in Austria-Hungary May 24, 1882, No. 5,129 and No. 20,195.

*To all whom it may concern:*

Be it known that I, JOSEPH PRENZEL, a citizen of Germany, residing at Hirschberg, in the Empire of Germany, have invented a new and  
5 useful Improvement in Violins or Similar Stringed Instruments, (for which I have obtained patents in Germany, No. 17,413, bearing date August 7, 1881; in Austria, No. 5,129, bearing date May 24, 1882, and in Hungary,  
10 No. 20,195, bearing date May 24, 1882,) of which the following is a specification.

In the accompanying drawings, Figure I is a longitudinal section of the neck of a violin at line W W, Fig. II. Fig. II is a front view of  
15 the same; and Fig. III is a cross-section at line V V, Fig. II.

Similar letters represent similar parts in all the figures.

In the neck B of the violin a suitable U-shaped case, A, is fitted, in which the upright  
20 pins *c* are secured, supported on cross-pieces *d*, inserted in the lower ends of the case A, and projecting some distance outside the top face, to which the strings S of the instrument are  
25 fastened. These pins *c* are provided with small worm-wheels *b*, placed inside the case A, into which a suitable screw-thread on the pegs *a* works. These pegs *a* are arranged in the sides of  
30 the neck of the violin, capable of turning freely, and are provided with the usual flattened thumb-pieces, *e*. By turning the pegs *a* in either direction the pins *c* will be turned and the strings S tightened or loosened, as may be

desired. The action of the screw-thread on the pegs *a*, with the worm-wheels *b* fast on the  
35 pins *c*, will facilitate this operation, and at the same time secure the position of the pins *c*. By this arrangement the back and part of the sides of the neck B of the instrument will be perfectly smooth for the free motion and slid-  
40 ing of the hand along the back of the instrument.

I am aware that it is not new to provide a guitar-head with a frame having arbors to  
45 which the strings of a guitar are attached, nor to combine with these arbors worm-wheels and screws, whereby said arbors are turned to tighten the strings. This construction and combination I do not broadly claim; but

What I do claim is—

In a violin or similar stringed instruments, the combination of the U-shaped case A, fitted into the neck B of the instrument, the pins  
50 *c*, with worm-wheels *b* fast on said pins *c* in the inside of the case A, the pegs *a*, provided  
55 with a screw-thread, and the strings S, substantially in the manner and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two sub-  
60 scribing witnesses.

JOSEPH PRENZEL.

Witnesses:

EDMUND BACH,  
HERM. PEISSKER.