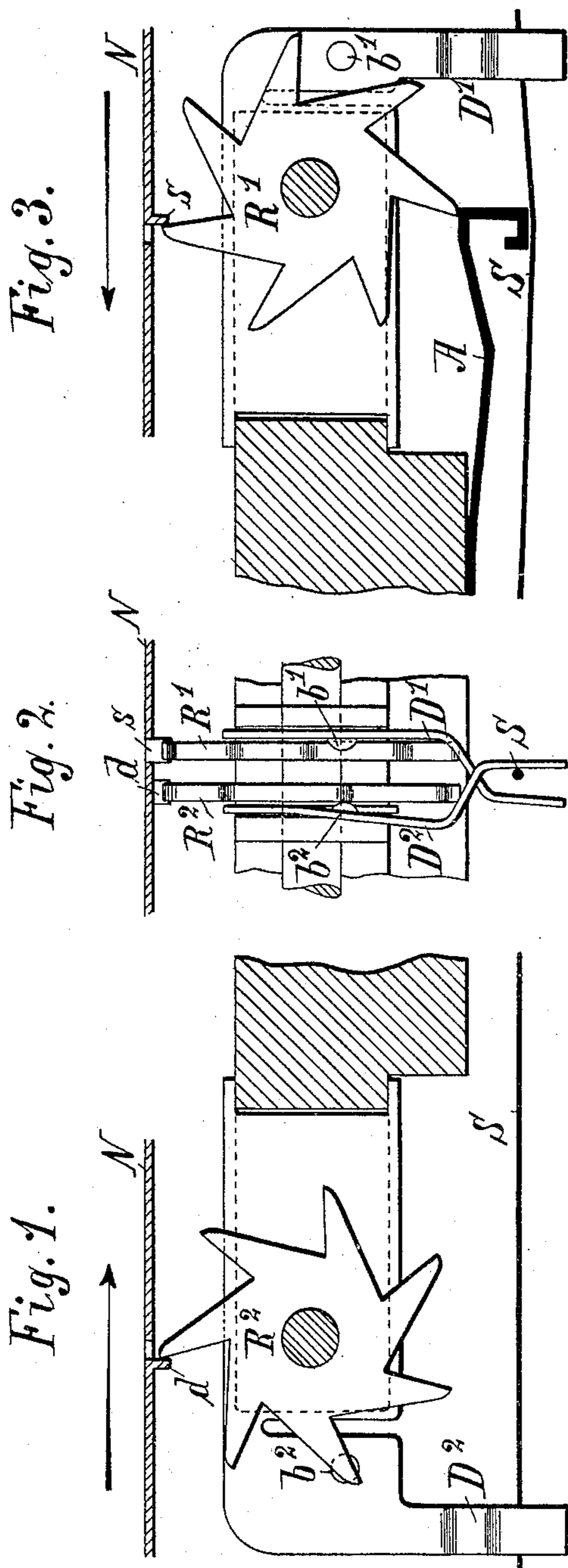


(No Model.)

M. O. CLAUS, T. B. PUTTMANN & H. E. C. FELIX.
MECHANICAL MUSICAL INSTRUMENT.

No. 574,240.

Patented Dec. 29, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

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MECHANICAL MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 574,240, dated December 29, 1896.

Application filed June 20, 1896. Serial No. 596,328. (No model.)

To all whom it may concern:

Be it known that we, MAX OTTO CLAUS, THEODOR BRUNO PÜTTMANN, and HANS EUGEN CURT FELIX, subjects of the King of Saxony, and residing at Leipsic-Gohlis, in the Kingdom of Saxony, Germany, have invented certain new and useful Improvements Connected with Mechanical Musical Instruments, of which the following is a specification.

10 This invention relates to an apparatus for damping before and after the sound in mechanical musical instruments. If strings or tongues are brought into vibration, they generally continue to oscillate for some time, and
15 they are also easily brought into vibration by shock or jar of any kind, and the strings or tongues not intended to be played sound easily in sympathy with the others which are played.

By means of this invention a string or
20 tongue, when it is to be played, is damped twice, that is, once shortly before it is played and once at a shorter or longer interval after it is played, according to the desired duration of the sound. This is effected by using two
25 special dampers for each string or tongue.

Figures 1, 2, and 3 of the annexed drawings show such damping apparatus for stringed instruments.

Each of the two dampers D' and D^2 is operated by a special toothed wheel R' and R^2 .

Fig. 3 shows the wheel R' and its preliminary damper D' . One tooth of the wheel has slid over the projection b' of the damper D' ,

so that the damper touched the string, and has receded therefrom before the key A was
35 pressed against the string S , as shown in Fig. 3. After the string has been released from this pressure and has sounded for some time the damper D^2 is carried by the toothed wheel
40 R^2 , Fig. 1, by means of its projection b^2 , against the string S , and the latter is again damped.

We claim as our invention in mechanical musical instruments—

1. The combination with vibratory sound-
45 producers and dampers therefor, of means for applying such damping devices severally to each sound-producer before and after it is vibrated.

2. The combination with a vibratory sound-
50 producer, of two dampers, means for operating said sound-producer, two toothed wheels adapted severally to operate the respective dampers and a music-sheet adapted to cause
55 the movement of said toothed wheels and of the sound-operating mechanism for damping before and after the operation of the sound-producer.

In witness whereof we have signed this specification in presence of two witnesses.

MAX OTTO CLAUS.

TH. BRUNO PÜTTMANN.

HANS EUGEN CURT FELIX.

Witnesses:

RUDOLPH FRICKE,
ERWIN RAABE.