

No. 644,052.

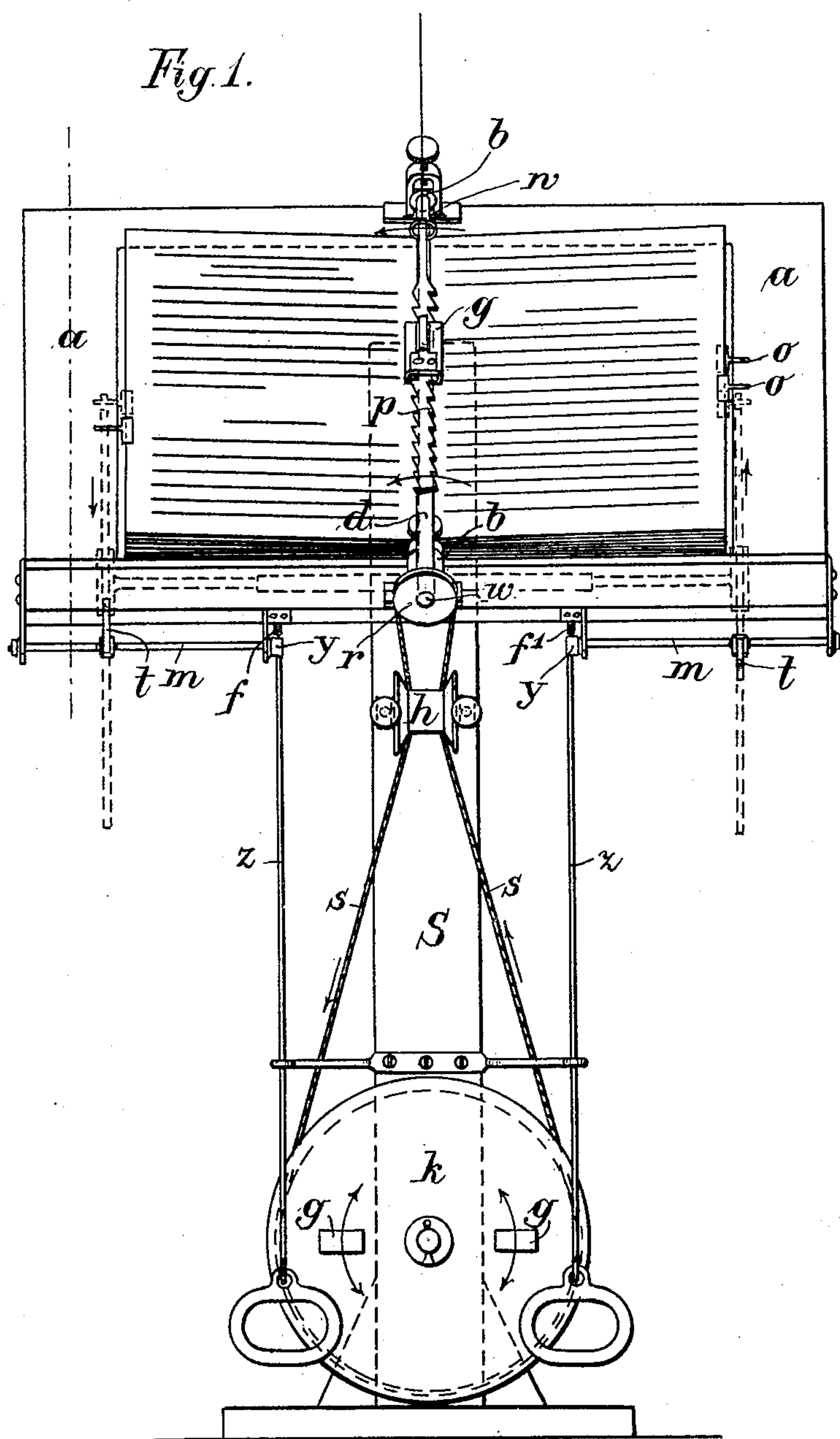
Patented Feb. 27, 1900.

B. BÖTTCHER.
MUSIC LEAF TURNER AND STAND.

(Application filed June 15, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

Alfred Winkler

Walter Jesse

Inventor:

Bernhardt Böttcher

by *Eustace W. Hoppening*

Att'y

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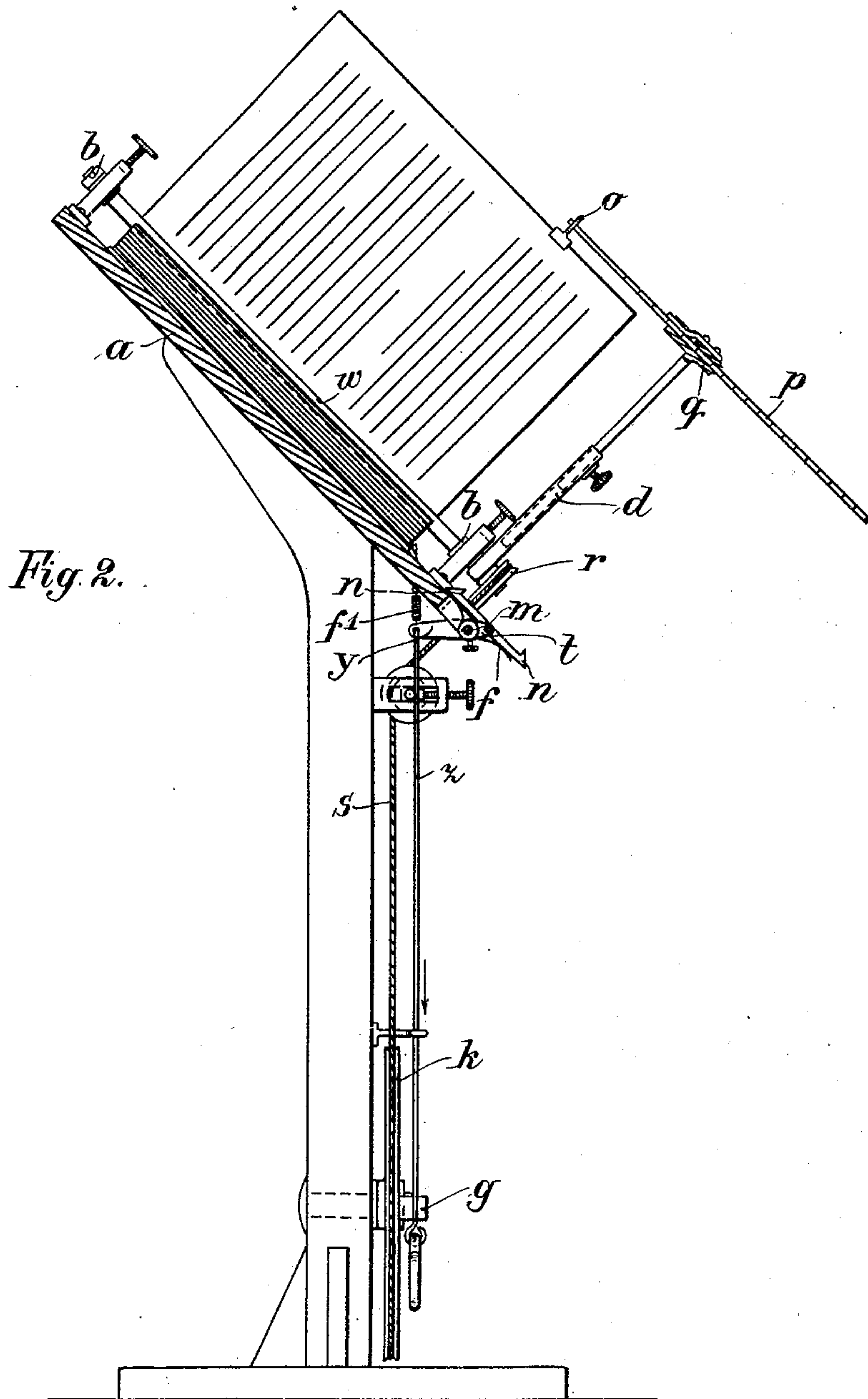
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Alfred W. Eichling
Walter Jesse

Inventor:

Bernhard Böttcher
by *Eusebius Hopmann*
Att'y.

UNITED STATES PATENT OFFICE.

BERNHARDT BÖTTCHER, OF TAUNUS, GERMANY.

MUSIC LEAF-TURNER AND STAND.

SPECIFICATION forming part of Letters Patent No. 644,052, dated February 27, 1900.

Application filed June 15, 1899. Serial No. 720,674. (No model.)

To all whom it may concern:

Be it known that I, BERNHARDT BÖTTCHER, a subject of the Emperor of Germany, residing at Köppern, Taunus, Germany, have invented certain new and useful Improvements in Music-Stands, of which the following is a full, clear, and exact description.

The present invention relates to music-stands; and it consists of a device, in connection with the same, for turning over the leaves of a piece of music.

The invention consists particularly of the details of construction hereinafter set forth, and particularly pointed out in the claims.

In order to render the present specification more easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

Figure 1 is a front elevation of the device, showing a leaf in its raised position when being turned; and Fig. 2 is a side elevation of Fig. 1 with the supporting-plate in section.

The device consists of the plate *a*, suitably supported on a stand in the usual manner. At the lower edge of the plate a telescopically-extensible arm *d* is mounted, fast on a spindle *w*, and this arm carries in a sleeve *q* at its free end a double rack *p*, adapted to move in the same, the said rack being acted on by a brush-spring within the sleeve, (not shown,) so that it will move with sufficient friction to remain in any position in the sleeve into which it may be adjusted. The spindle *w* is mounted in adjustable bearings *b b*, situated at the top and bottom of the center of the desk *a*. The lower end of the spindle *w* carries a cord-pulley *r*, around which an endless cord *s* passes. This cord is guided over the guide-roll *h* and a disk *k*, mounted at the lower part of the stand, within convenient reach of the player's foot, the said disk *k* having two pedals *g g*, by means of which it may be partially turned. Thus when it is turned in the one or other direction the arm *d* will be thrown over from right to left, or vice versa, and will take over the leaf in the manner hereinafter set forth.

At either side of the lower edge of the desk are mounted horizontal spindles *m*, each of which supports a pawl *n*, which lies in the path of movement of the double rack *p* of the

arm *d*. These pawls are arranged with their hooks in opposite directions, as will be seen from Fig. 2, the said pawls being mounted on the shorter arms of levers *y t* and each controlled by a spring, which causes each hook, when the spindle *m* is turned partially, to move in a path approximately parallel to that of the racks of the bar *p*. The longer arm of each of the levers *y t* is spring-pressed or retained upwardly by means of a spring *f f'*, while a downwardly-extending connecting-rod *z* connects the said longer arm of each lever to a loop, in which the foot of the player may be inserted.

When playing a piece of music each of the leaves which it is required to turn over is provided with an eye *o*, clamped to the edge of the leaf, in which the upper end of the rack *p* engages before the arm is thrown over, and after this has taken place is disengaged and caused to return to engage and take around the next leaf.

The device operates in the following manner: The eyes are advantageously arranged on the leaves at various heights. Looking at Fig. 1 it would be necessary to turn the right-hand leaf over to the left-hand side, and this is done by first depressing the right loop of the bar *z*, it being understood that the arm *d* and the rack *p* are occupying a position against the music-sheet on the right. This causes the pawl *n*, which is at the time lying against the rack *p*, to raise the said rack corresponding to the movement of the pawl, and thus to insert the upper end of the bar *p* through the eye clamped to the leaf, the said rod engaging the lowest eye. The left pedal *g* is now depressed and throws the arm *d* over, and with it the leaf. The left loop or ring of rod *z* is now depressed, and owing to the fact that its pawl is arranged in the opposite direction to that of the right-hand spindle it will slide along the other rack of *p*, and when the loop or ring is released the spring *f* will carry the pawl down, taking the bar *p* with it, and thus drawing its upper end out of the ring *o*. The right pedal *g* is then depressed and the arm *d* thrown back in readiness to engage the next eye *o*, when the apparatus is again operated.

I claim as my invention—

1. In a music-stand, the combination of a

spindle mounted in adjustable bearings and extending from the upper to the lower part of the desk, a cord-pulley on the lower end thereof and a cord-disk, by means of which
5 said pulley may be operated by the foot of the player to partially turn said pulley, an arm fast on the said pulley-spindle having a sliding double rack mounted in its free end and an eye attached to each leaf of the mu-
10 sic, to be turned over and means for causing said sliding rack to engage with its upper end one of said leaf-eyes, and for disengaging said rack end from the said leaf-eye after the leaf has been turned over substantially as de-
15 scribed.

2. In a music-stand the combination of a centrally-disposed spindle and means for turning the same from the lower part of the stand,

substantially as set forth, an arm fast on said spindle and a sliding double rack mounted 20 at the free end of said arm, a pawl at either side of the desk in the path of movement of the said arm and rack, each pawl being adapted and movable to operate said rack in the opposite directions, a rotary spindle at either 25 side of the desk, having lever to carry the said pawl, and footholds or loops suspended from said levers to operate said pawls in the manner and for the purpose substantially as described and for the purpose specified. 30

In witness whereof I have hereunto set my hand in presence of two witnesses.

BERNHARDT BÖTTCHER.

Witnesses:

JEAN GRUND,

RICHARD GUENTHER.