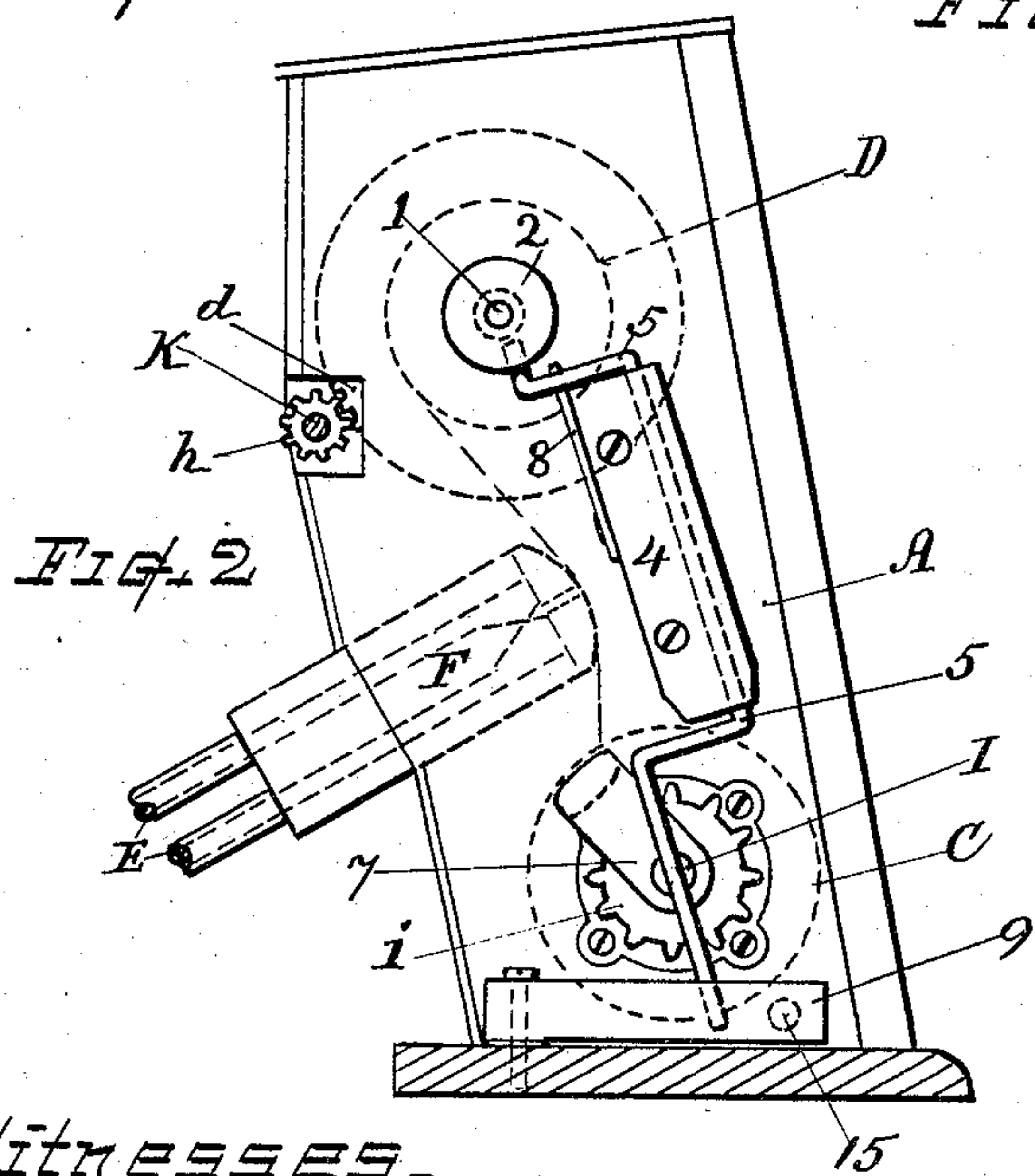
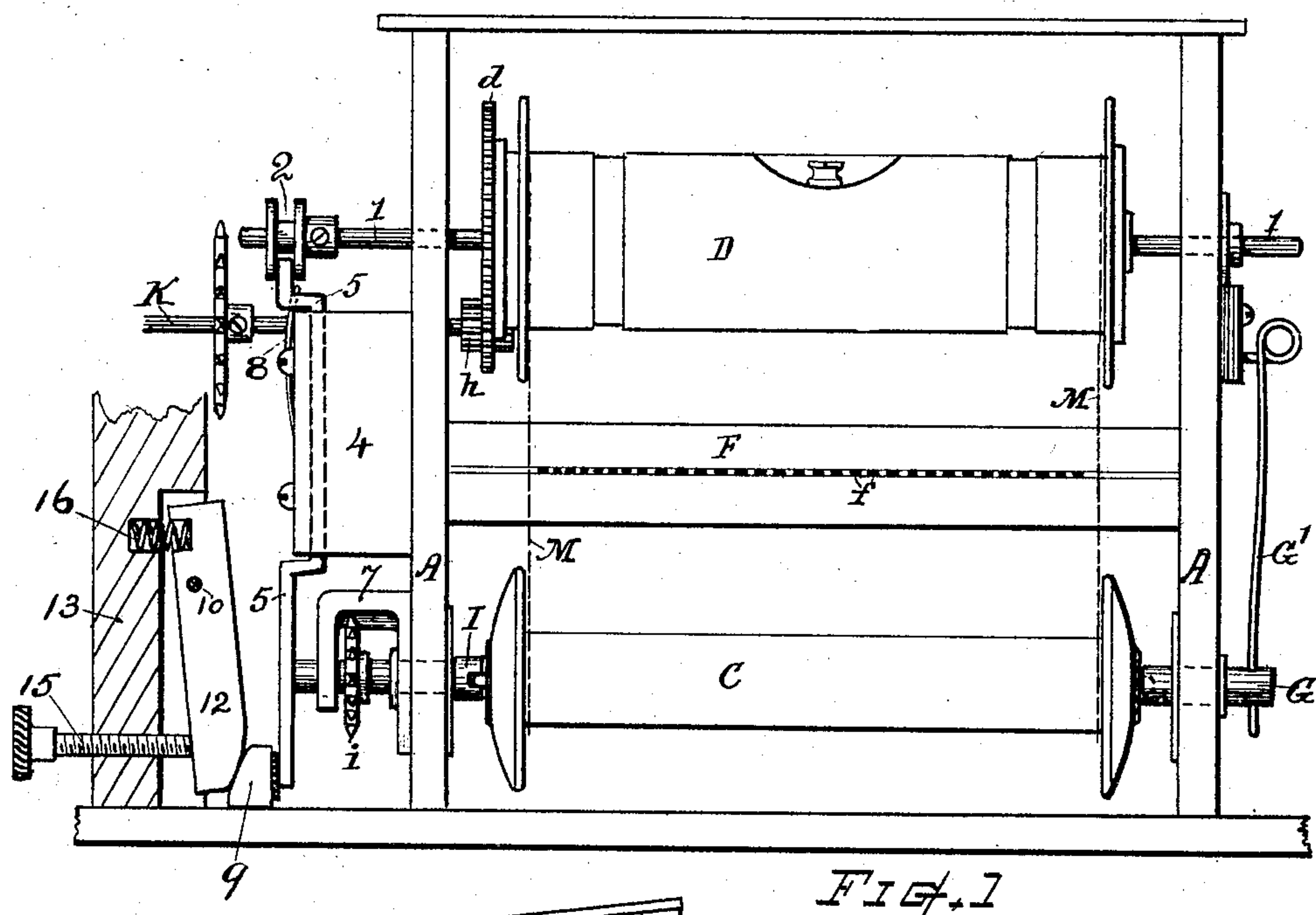


No. 794,101.

PATENTED JULY 4, 1905.

N. D. HOSLEY.
MECHANICAL MUSICAL INSTRUMENT.

APPLICATION FILED FEB. 20, 1905.



WITNESSES.
Charles S. Bacon
Fred H. Flinn.

INVENTOR.
Nelson D. Hosley.
By Chas. H. Burlingame,
Attorney.

UNITED STATES PATENT OFFICE.

NELSON DAGGETT HOSLEY, OF MERIDEN, CONNECTICUT, ASSIGNOR TO
WILCOX & WHITE COMPANY, OF MERIDEN, CONNECTICUT, A COR-
PORATION OF CONNECTICUT.

MECHANICAL MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 794,101, dated July 4, 1905.

Original application filed October 31, 1904, Serial No. 230,721. Divided and this application filed February 20, 1905. Serial No. 246,381.

To all whom it may concern:

Be it known that I, NELSON DAGGETT HOSLEY, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Mechanical Musical Instruments, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

This invention relates to means for regulating or adjusting simultaneously the music-spool, winding-roll, and perforated music-sheet carried thereby in relation to the tracker in an automatic musical instrument, the object being to provide a convenient, simple, and efficient means whereby the operator can at any time effect a slight lateral shift of the music-sheet to cause its perforations to run in accurate alinement with the respective tracker-orifices; also, to provide a means for the purpose stated which can be manipulated while the music is in operation. These objects I attain by the mechanism illustrated in the accompanying drawings, wherein—

Figure 1 represents a front view of the music-operating devices and tracker of a mechanical musical instrument having my invention combined therewith. Fig. 2 represents an end view of the same.

In the drawings, A denotes the housing or spool-frame, which may be of any suitable construction for the supporting-bearings or journals of the music-spool C and take-up roll D, which are rotatably mounted therein in well-known manner.

F indicates a tracker disposed between the music-spool and take-up roll and provided in its face with a series of orifices or openings into the ducts E, that lead to the primary pneumatics (not shown) of a music-playing instrument, as will be understood by those conversant with the art.

G indicates the endwise-yielding bearing for one end of the music-spool. Said bear-

ing is provided with a suitable spring G' for normally pressing it inward.

I denotes the spool-coupling arbor or journal, having thereon a sprocket-wheel *i* for the rewinding-chain, which may be arranged in the usual or any suitable manner.

K indicates the drive-shaft, carrying the pinion *h*, that meshes with the gear *d* of the take-up roll, and by means of which shaft the music-winding mechanism is operated.

The music-sheet as passed over the tracker from the spool C to the take-up roll D is indicated by the dotted lines M.

The above-named parts comprise a music-winding mechanism substantially such as is employed in automatic pianos, autopneumatic piano-players, and similar classes of music-playing instruments, and my present invention is applicable to the music-winding mechanism in each and all of said classes of instruments. In accordance with my invention there is combined with the music-winding devices and tracker a swinging member, bar, or dually-cranked rocker-rod 5, fulcrumed on a suitable bearing-piece 4, attached to the housing or frame A and having one of its offset ends engaging with a flanged sheave or collar 2, fixed on the shaft 1 of the take-up roll D, which is movable endwise in its bearings. The other offset end of the rocker 5 extends across the end of the spool-coupling arbor I, which latter is endwise movable in the bearing 7. A suitable spring 8 is provided for normally pressing the offset portion of said rocker from the spool-frame, while the spring G' at the opposite end of the spool tends to press the music-spool and its arbor in the same direction or toward the rocker device.

Combined with the bar or rocker device I employ suitable means—such, for instance, as an adjusting-screw or an equivalent actuator—whereby the rocker can be given slight adjustive movement in one direction or the other. In the present instance the adjusting means is arranged as follows: Resting against the lower end of the rocker there is a swing

member 9, beveled on its outer side, and within the cheek or portion of the casing 3 there is pivoted at 10 a contact-piece 12, having a beveled end that acts against the swing member 5 and rocker device, as illustrated. The adjusting-screw 15 is arranged through the casing 13 with its thumb-head at the exterior and its point impinging against the contact-piece. A spring 16 serves to keep the end of the contact-piece back against the screw. The parts 9 and 12 form unattached connectors for transmitting the adjustive effect of the screw to the bar or rocker device. The screw serves for varying the position of the rocker 5 inward or outward and effecting in accord therewith simultaneous endwise movement of the music-spool, take-up roll, and music-sheet slightly to the right or left to bring the music-perforations of any piece of music into accurate alignment with the tracker-duct orifices or to obviate any deviations in the running of the music over the tracker.

What I claim as of my invention, and desire to secure by Letters Patent, is—

25 1. The combination, with the tracker, roll-housing frame, music-winding take-up roll, and music-spool-clutch arbor; of a bearing-block attached to the frame, the bent-wire

rocker device supported on said bearing-block and having an upward-projecting offset 30 cranked end engaging a flanged sheave fixed on the take-up-roll shaft, and a downward-projecting cranked end acting against the end of the spool-clutch arbor, a spring that normally presses the offset portion of the rocker 35 outward, a presser device acting against said rocker, and means for actuating said presser from the exterior, for moving said rocker in opposition to said spring, substantially as set forth. 40

2. The combination, with the tracker, music-winding take-up roll, music-spool and its clutch-arbor; of a rocker device fulcrumed on a stationary bearing-piece and having offset 45 portions that respectively engage with the take-up-roll shaft, and spool-clutch arbor, a spring pressing said music-spool and arbor toward the rocker, and an adjusting-screw, with unattached connectors, acting against 50 said rocker, for the purpose set forth.

Witness my hand this 16th day of February, 1905.

NELSON DAGGETT HOSLEY.

Witnesses:

FRANK C. WHITE,
RUSSELL H. WHITE.