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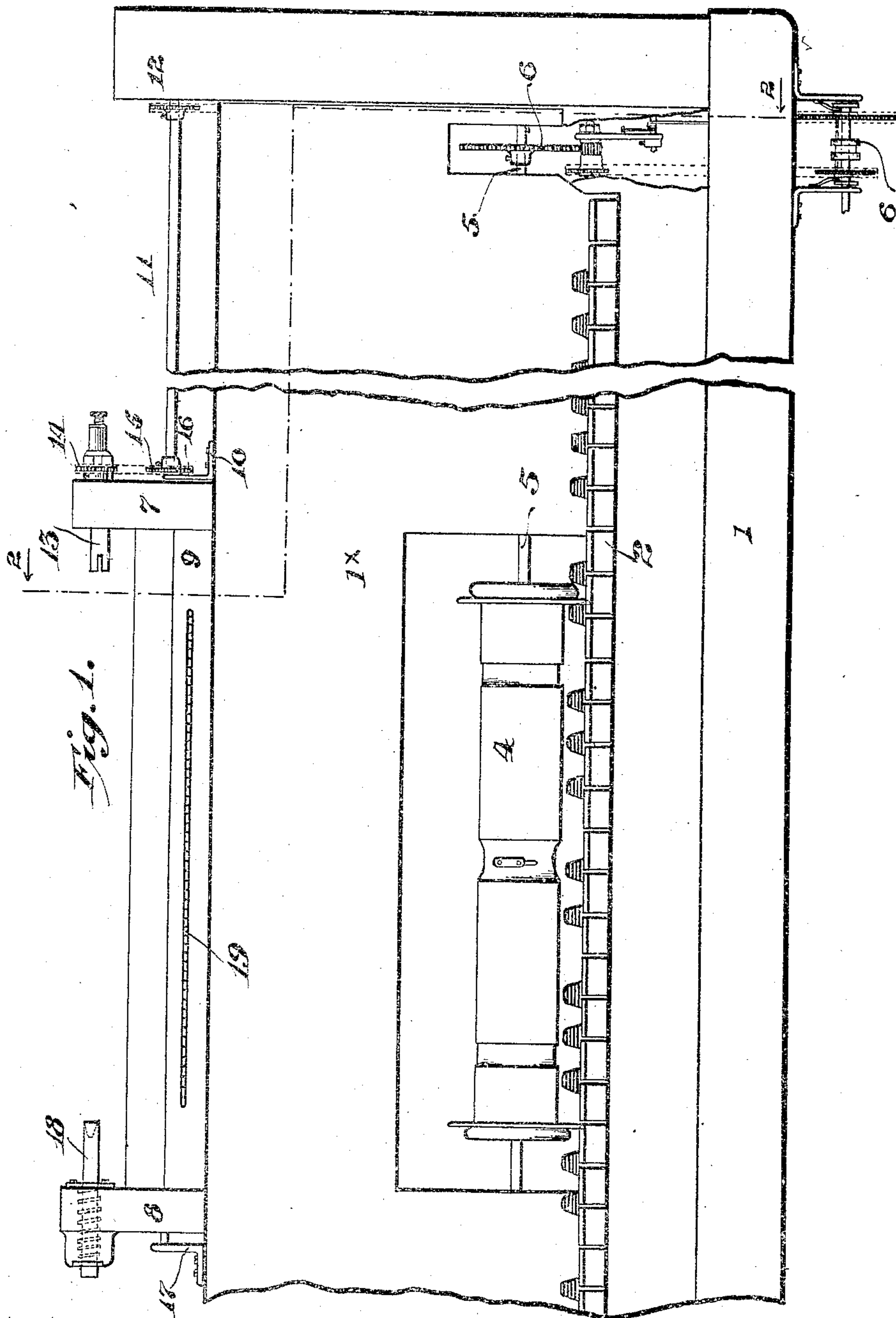
E. S. VOTEY.

PATENTED JULY 24, 1906.

TRACKER AND ASSOCIATED PARTS FOR MECHANICAL MUSICAL INSTRUMENTS.

APPLICATION FILED DEC. 1, 1905.

2 SHEETS—SHEET 1.



Attest:
A. L. O'Brien
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Inventor:
Edwin S. Votey
by *Dickerson, Brown, Raegener & Bimley*
Attys.

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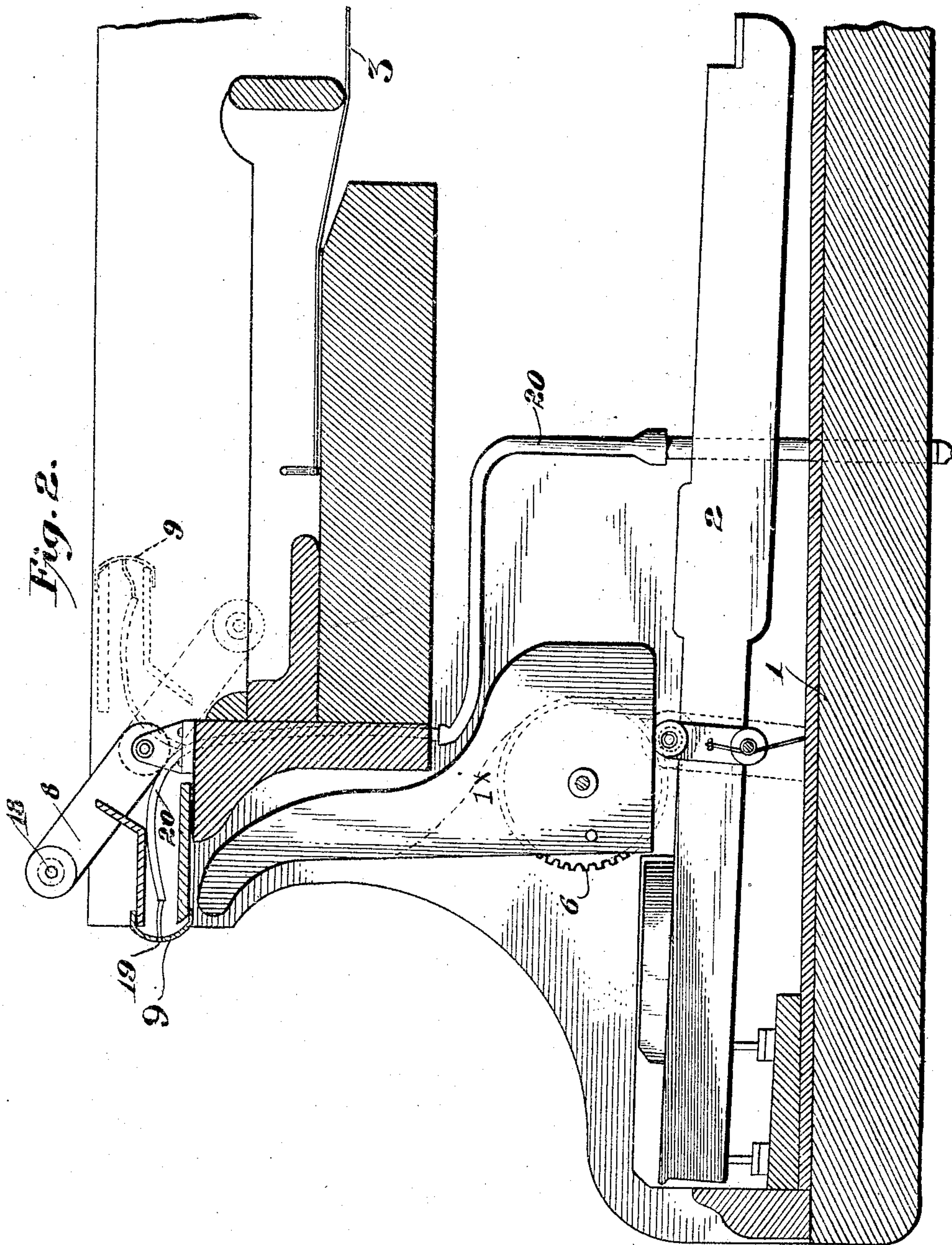
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by *Dickerson, Brown, Raegen, Binney*
Attys

UNITED STATES PATENT OFFICE.

EDWIN S. VOTEY, OF SUMMIT, NEW JERSEY, ASSIGNOR TO THE AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CONNECTICUT.

TRACKER AND ASSOCIATED PARTS FOR MECHANICAL MUSICAL INSTRUMENTS.

No. 826,753.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed December 1, 1905. Serial No. 289,760.

To all whom it may concern:

Be it known that I, EDWIN S. VOTEY, a citizen of the United States, and a resident of Summit, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Trackers and Associated Parts for Mechanical Musical Instruments, of which the following is a specification.

My invention relates to musical apparatus provided with means for automatically playing the same through the operation of a perforated music-sheet. Its object is to secure compactness and simplicity of construction and convenience of operation by making some of the parts movable from their operative position to a position where they may be concealed from view when not in use or where at least they will not interfere with the manual operation of the instrument.

It consists of means to this end and of combinations of parts which will be pointed out in the claims.

In the drawings, Figure 1 is a front elevation of so much of a keyboard musical instrument as is necessary to illustrate my invention. Fig. 2 is a vertical section through the line 2 2, Fig. 1.

1 designates the bottom of an instrument, above which are mounted keys 2, which together constitute the keyboard of the instrument. The mechanism by which these operate on the strings 3 is not shown, as it forms no part of the present invention. Mounted immediately above the keyboard 2 of the instrument and in a suitable recess in the pivoted key-covering portion 1^x at the rear of the manual portion of the keys is a music-sheet-winding roll 4, commonly known as a "take-up" roll. This is connected by a shaft 5 to mechanism 6 for rotating the roll for winding the sheet thereon during the operation of playing. This mechanism is of usual or any desired form and need not be further described.

Mounted above the keyboard 2 and above the roll 4, and in the present instance above and in front of the strings 3, are two brackets 7 and 8, between and secured to which is a tracker 9. The bracket 7 is shown as pivotally mounted on a lug 10 and as having the shaft 11 extending therefrom in an axial line with the pivot. The shaft 11 is connected at

one end with a sprocket 12 as a means for rotating the shaft. Passing through the free end of the bracket 7 is a shaft 13, provided at its inner end with means for engaging the driving-pin on the end of a music-roll (n shown) and at its outer end with a sprocket 14, connected by a chain 15 to a sprocket 16 on the shaft 11. The bracket 8 is shown as pivotally mounted on the lug 17, secured, like the lug 10, to a fixed portion of the instrument and as carrying at its free end a shaft 18, provided at its inner end with means for engaging a pin at the end of a music-roll. The brackets 7 and 8 together constitute a support for the music-roll, and these brackets, with the tracker 9, are capable of pivotal movement from their operative position, (shown in full lines, Fig. 2,) to their non-operative position. (Shown in dotted lines.)

It will be seen that in its operative position the tracker extends forwardly and the music-roll support is located above the tracker, so that the music-sheet in passing from the music-roll to the winding-roll 4 over the tracker 9 is presented to the view of the operator in the usual manner. When the parts 7, 8, and 9 are turned on their pivots to the position shown in dotted lines, Fig. 2, they may be covered from view by any suitable movable portion. (Not shown.)

While I have shown the brackets 7 and 8 as movable integrally with the tracker 9, it is obvious that this is not essential to my invention in its broadest view, as these might be separately mounted for movement into and out of operation, if it is so desired. I have also shown the device as applied to a grand or square piano—i. e., to one having horizontally-disposed case and strings; but it is obviously equally applicable to an upright piano as well as to an organ or other desired form of keyboard musical instrument. I have also shown the ducts 19 of the tracker 9 as connected by flexible connections 20, which pass to a point beneath the keyboard, where the pneumatic action may be located. While this is a convenient and preferred arrangement, it is of course non-essential to the invention in its broadest sense.

What I claim is—

1. In musical apparatus, a music-sheet-winding roll mounted in stationary bearings,

and a tracker pivotally movable independently of said winding-roll into and out of operative position.

2. In musical apparatus, a music-sheet-winding roll mounted in stationary bearings, and a tracker movable independently of said winding-roll upwardly and rearwardly out of operative position.

3. In musical apparatus, a music-sheet-winding roll mounted in stationary bearings, and a music-roll support including a pair of brackets and a roll-engaging device on each of said brackets movable in a plane approximately at a right angle with its axis and independently of said winding-roll into and out of operative position.

4. In musical apparatus, a music-sheet-winding roll mounted in stationary bearings, and a tracker and a music-roll support movable independently of said winding-roll into and out of operative position.

5. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a tracker pivotally mounted above said winding-roll and movable independently thereof into and out of operative position.

6. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a tracker mounted above said winding-roll and movable independently thereof upwardly and rearwardly out of operative position.

7. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a combined tracker and music-roll support pivotally mounted above said winding-roll and movable independently thereof into and out of operative position.

8. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a music-roll support mounted above said winding-roll and movable independently thereof upwardly and rearwardly out of operative position.

9. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a tracker pivotally movable independently of said winding-roll into operative position above said keyboard and rearwardly out of such operative position.

10. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a music-roll support pivotally movable independently of said winding-roll into operative position above said keyboard and rearwardly out of such operative position.

11. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted above said keyboard, and a tracker and a music-roll support pivotally movable independently of said winding-roll into operative

position above said keyboard and rearwardly out of such operative position.

12. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted in stationary bearings above said keyboard, and a tracker and a music-roll support mounted above and independently of said winding-roll and secured together and simultaneously movable into and out of operative position.

13. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted in stationary bearings above said keyboard, and a tracker and a music-roll support pivotally mounted on a common axis and movable into operative position above said keyboard and rearwardly out of such operative position.

14. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted in stationary bearings above said keyboard, and a tracker and a music-roll support pivotally movable into operative position above said keyboard and rearwardly out of such operative position.

15. In a musical instrument, a keyboard, a music-sheet-winding roll rotatably mounted in stationary bearings above said keyboard, a tracker pivotally movable independently of said winding-roll into operative position above said keyboard and rearwardly out of such operative position, and flexible connections leading from said tracker to points beneath said keyboard.

16. In musical apparatus, a music-sheet-winding roll rotatably mounted in stationary bearings, a music-roll support comprising two pivotally-mounted brackets spaced apart and movable together independently of said winding-roll, a roll-engaging shaft in one of said brackets, and means for rotating said shaft connected thereto independently of the position of said bracket.

17. In musical apparatus, a music-sheet-winding roll rotatably mounted in stationary bearings, a music-roll support comprising two pivotally-mounted brackets spaced apart and movable together independently of said winding-roll, a roll-engaging shaft in one of said brackets, a driving-pulley in axial line with the pivot of said bracket, a driven pulley on said shaft, and means connecting said pulleys independently of the position of said bracket.

18. In a musical instrument, a keyboard, a recessed portion immediately above said keyboard and at the rear of the manual portion thereof, and a music-sheet-winding roll rotatably mounted in said recess.

19. In a musical instrument, a keyboard, a movable portion for covering the manual portion of the keys and provided with a recess, and a music-sheet-winding roll rotatably mounted in such recess.

20. In a musical instrument, a keyboard, a recessed portion above said keyboard and at

the rear of the manual portion thereof, a music-sheet-winding roll rotatably mounted in such recess, and a tracker pivotally mounted on a stationary portion of the instrument above said winding-roll for movement into and out of operative position.

21. In a musical instrument, a keyboard, a recessed portion above said keyboard and at the rear of the manual portion thereof, a music-sheet-winding roll rotatably mounted in such recess, and a music-roll support pivotally mounted on a stationary portion of the instrument above said winding-roll for movement into and out of operative position.

22. In a musical instrument, a keyboard, a

recessed portion above said keyboard and at the rear of the manual portion thereof, a music-sheet-winding roll rotatably mounted in such recess, and a tracker and a music-roll support pivotally mounted on a stationary portion of the instrument above said winding roll for movement into and out of operative position.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWIN S. VOTEY.

Witnesses:

D. C. HEINS,

W. C. MANSFIELD.