

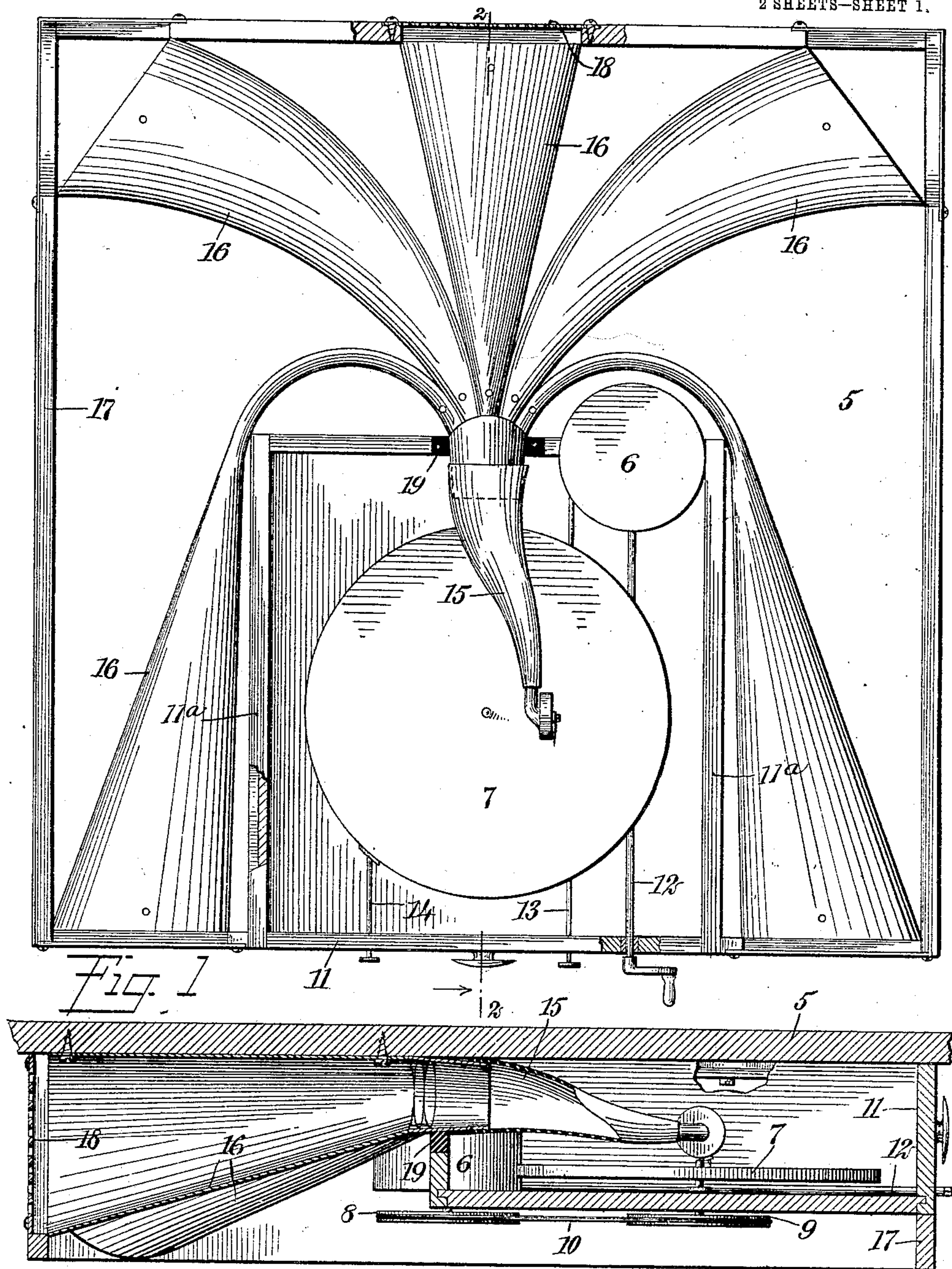
RECORDING AND REPRODUCING
MACHINE

J. SCHWAN.
SOUND REPRODUCING MACHINE.
APPLICATION FILED AUG. 20, 1907.

898,791.

Patented Sept. 15, 1908.

2 SHEETS—SHEET 1.



WITNESSES
E. G. Bromley
W. W. Abel

Fig. 2

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U.S. PATENT OFFICE
JULY 1908

Draftman.

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Fig. 3

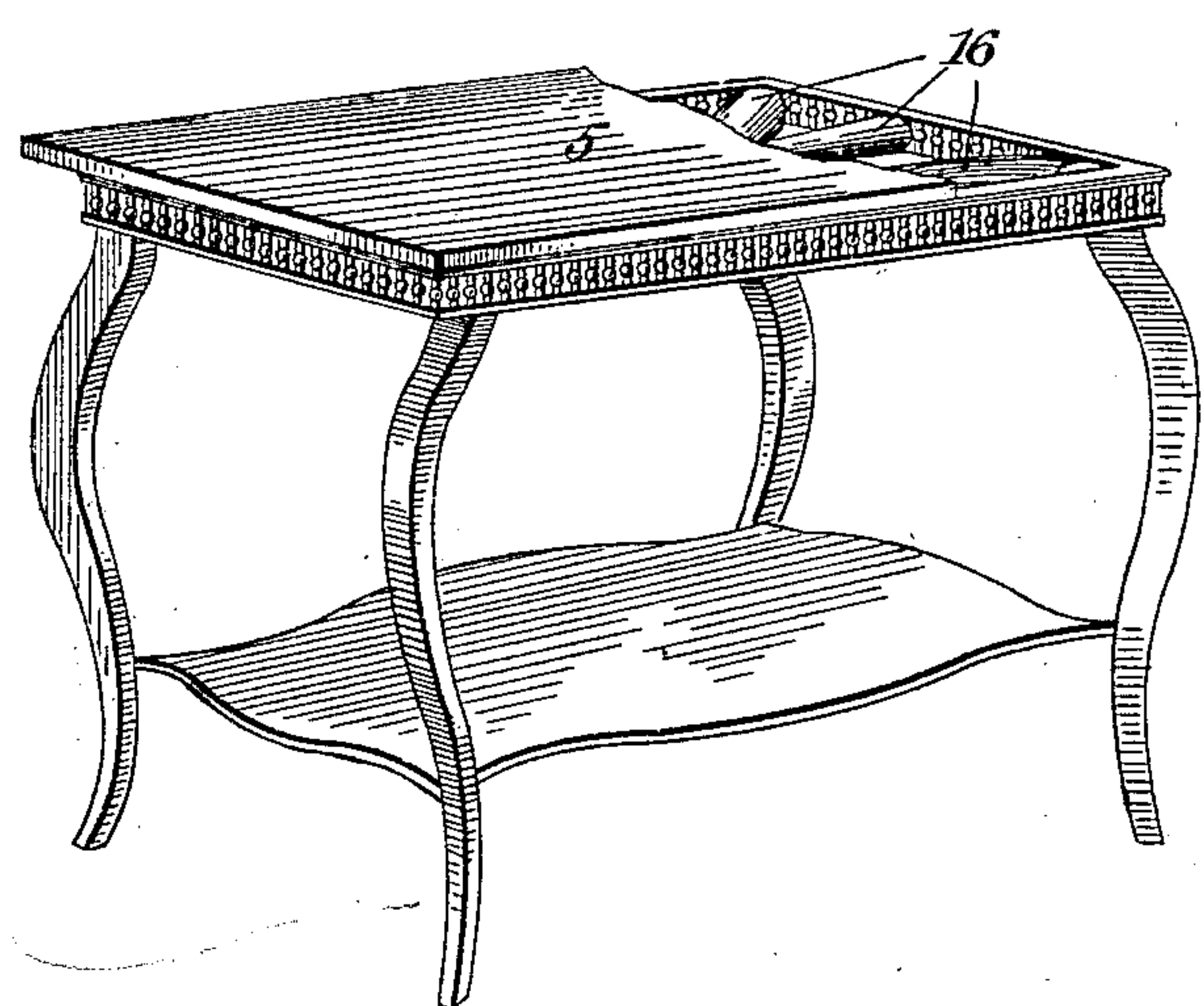
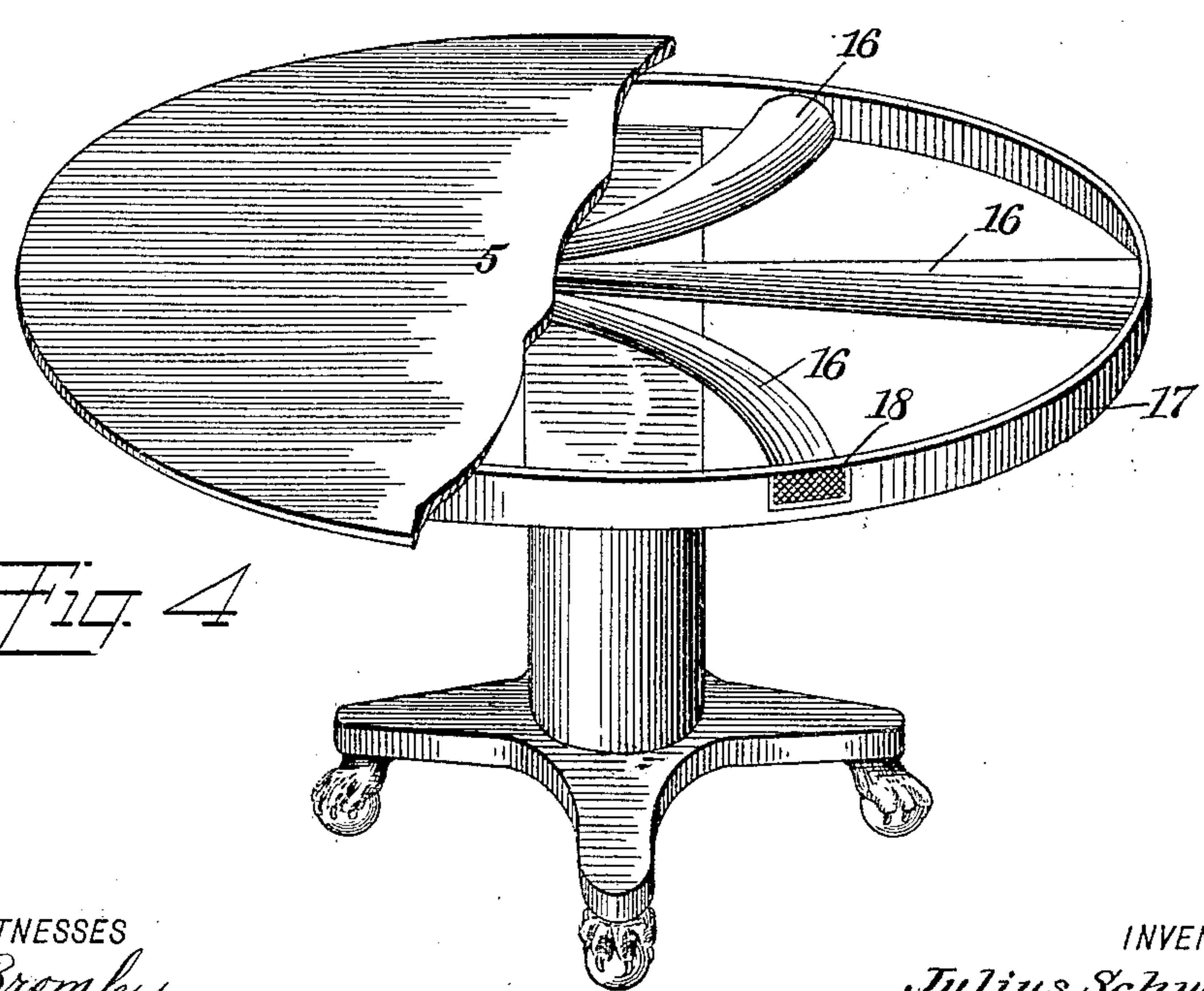


Fig. 4



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UNITED STATES PATENT OFFICE.

JULIUS SCHWAN, OF NEW YORK, N. Y.

SOUND-REPRODUCING MACHINE.

No. 898,791.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed August 20, 1907. Serial No. 389,386.

To all whom it may concern:

Be it known that I, JULIUS SCHWAN, a citizen of the United States, and a resident of the city of New York, borough of the Bronx, in the county and State of New York, have invented new and useful Improvements in Sound-Reproducing Machines, of which the following is a full, clear, and exact description.

This invention is an improvement in sound reproducing machines, relating more especially to the arrangement of such devices whereby they will at all times occupy a concealed and removed position. With this in view I construct the machine as a permanent part of a support having a flat top and in the nature of a table, and movably support the machine casing below the top. The support is provided with a number of horns radiating to its border and connecting with the horn of the machine, which serve to uniformly distribute the sound waves throughout the room. By this arrangement it is apparent that the ordinary use of the support as a table is not impaired, and the machine, which is to many an unsightly object, is concealed and protected from the dust.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan of a support in the form of a library table with the top removed, having one embodiment of my improvement applied thereto; Fig. 2 is a cross-section of the same on the line 2—2 of Fig. 1; Fig. 3 is a perspective view of the support shown in Fig. 1, with the top partly broken away showing the position of the radiating horns; and Fig. 4 is a like view of the invention applied to a round-top support in the form of a dining table.

In connection with a flat-top support in the nature of a library table or dining table, I make as a permanent part thereof any ordinary or other preferred form of sound reproducing machine, that shown consisting of a motor 6 which drives the record holder 7 through the intermediary of pulleys 8 and 9, respectively carried by the motor and holder and connected together by a belt 10, said belt and pulleys being arranged at the bottom of the machine casing, which, as shown, is in the form of a drawer 11 having flanges 11^a at its top edges slidable inwise directly

underneath the flat top. This precise manner of movably mounting the drawer is, however, not material, as it is only essential to my invention that the drawer be movably supported directly under the top and closely adjacent thereto. The machine further includes a winding stem 12 and a starter 13 for the motor, as well as a stopping device 14, all of which pass through the front of the casing where they are provided with suitable devices for their convenient operation.

The horn 15 of the machine is preferably directed to the back of the casing and is supported in any suitable manner in alinement with the neck of a series of radiating horns 16, which are substantially horizontally disposed and lead to the depending marginal flange 17 of the support, where openings are provided covered with ornamental perforated plates 18; this construction obviously operating to substantially uniformly distribute the sound waves about the room. As shown, the horn 15 telescopes with the neck of the radiating horns, which is received within an opening formed in the rear of the drawer, and is insulated by a ring of rubber or other like material 19 in order that the resonance of the horns may not be impaired.

The arrangement and construction provide for the convenient access to the machine and its operation without impairing the ordinary use of the support, and the talking machine, which is to many an unsightly object, is removed from view as well as protected from dust.

While I have illustrated the preferred construction and arrangement of my invention, it is apparent that various immaterial changes may be resorted to within the scope of the invention as defined in the claims annexed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In combination with a support having a flat top, a sound reproducing machine having a casing supported from and movably mounted directly under said top.

2. In combination with a support having a top provided with a depending marginal flange, a horn fixed directly beneath said top leading to an opening in said depending marginal flange, and a sound reproducing machine having a casing movably supported under the top and provided with a horn adapt-

ed to telescope with the first mentioned horn when the casing is disposed in normal operative position.

3. In combination with a support having
5 a top provided with a depending marginal flange having openings therein, radiating horns laterally disposed directly beneath said top leading to said openings and having a common neck, and a sound reproducing
10 machine located under said top having a horn adapted to telescope with the neck of said radiating horns when in operative position.

4. In combination with a support having
15 a flat extended top provided with a depending marginal flange having openings therein, a series of radiating horns fixed directly beneath the top of the support and connecting with said openings, and a sound reproducing
20 machine located directly under the top of the support at substantially the same elevation as the said horns and connected therewith.

5. In combination with a support having
25 a flat top provided with a depending marginal flange having openings therein, a series of radiating horns substantially horizontally disposed and secured directly beneath said top and leading to said openings, perforated
30 plates covering said openings, and a sound reproducing machine concealed under the top of the support at substantially the same elevation as the radiating horns and connected therewith.

35 6. In combination with a support having a flat top, a sound reproducing machine having a casing slidably supported from and arranged directly under said top.

7. In combination with a support having
40 a flat top provided with a depending marginal flange, a sound reproducing machine having a casing slidably supported directly under said top with one side of the casing

forming a continuation of said flange when the casing is in operative position. 45

8. In combination with a support having a flat top provided with a depending marginal flange, a sound reproducing machine having a casing located directly under said top with one side of the casing forming a con- 50 tinuation of said flange when the casing is in operative position, and means for controlling the machine passing through that portion of the casing forming a part of the flange. 55

9. In combination with a support having a top, a sound reproducing mechanism having a casing supported from and movably mounted under the top, and including means for winding, starting and stopping said 60 mechanism passing through the front of the casing.

10. In combination with a support having a top, a horn secured directly under said top, and a sound reproducing machine having a 65 casing movably mounted under said top and including a horn adapted to telescope with the first mentioned horn when the casing is moved to operative position.

11. In combination with a support having 70 a top, a horn secured beneath said top, a sound reproducing machine having a casing movably mounted under said top and including a horn adapted to telescope with the first mentioned horn when the casing is in 75 operative position, and means for insulating that portion of one of said horns which passes through the casing.

In testimony whereof I have signed my name to this specification in the presence of 80 two subscribing witnesses.

JULIUS SCHWAN.

Witnesses:

W. W. HOLT,
JOHN P. DAVIS.