

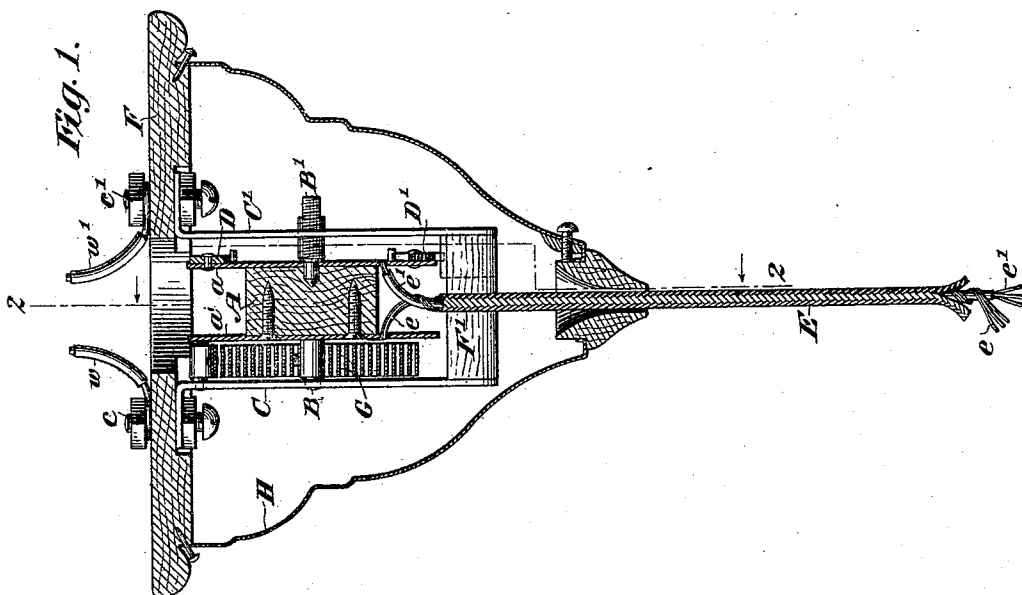
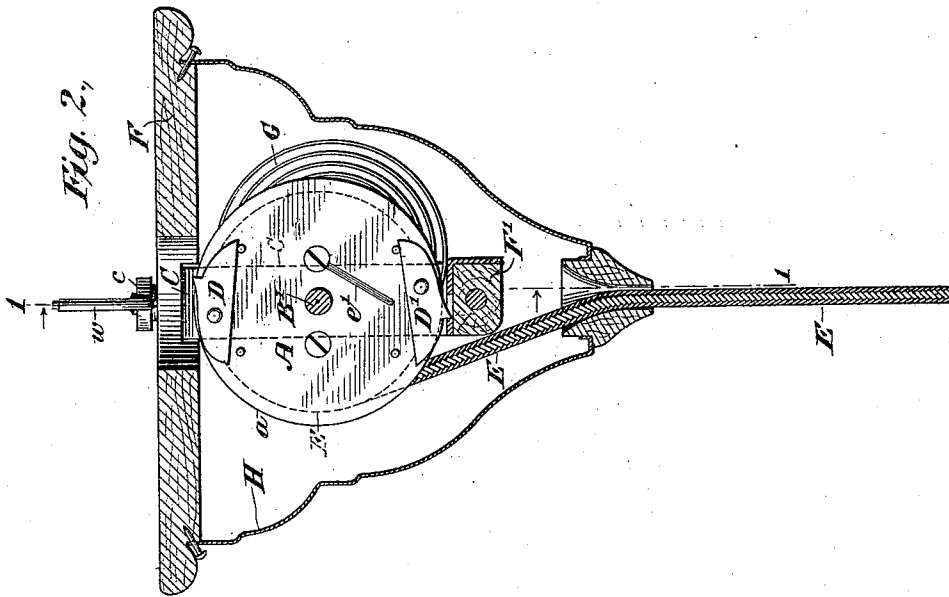
(No Model.)

H. D. SISSON.

ADJUSTABLE SUSPENSION APPARATUS FOR ELECTRICAL TRANSLATING DEVICES.

No. 470,080.

Patented Mar. 1, 1892.



Witnesses
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HARRY D. SISSON, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO CHARLES H. ROBINSON, OF SAME PLACE.

ADJUSTABLE SUSPENSION APPARATUS FOR ELECTRICAL TRANSLATING DEVICES.

SPECIFICATION forming part of Letters Patent No. 470,080, dated March 1, 1892.

Application filed September 24, 1891. Serial No. 406,653. (No model.)

To all whom it may concern:

Be it known that I, HARRY D. SISSON, a citizen of the United States, and a resident of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Suspension Apparatus for Electrical Translating Devices, of which the following is a specification.

This invention relates to spring-reels for suspending electric lamps, electric fans, or other translating devices of like nature actuated by electric currents; and it consists of a combination of mechanism whereby such device may be supported at any desired height.

In the accompanying drawings, Figure 1 is a vertical transverse section of an apparatus embodying my invention, taken in the plane of the dotted line 1 1 in Fig. 2; and Fig. 2 is another vertical transverse section taken at right angles to and in the plane of the dotted line 2 2 in Fig. 1.

In the drawings, A is a reel or drum provided with flanges *a a'* and having journals at its opposite ends, which turn in suitable journal-bearings formed in the frame C C'. This frame is of metal and is made in two parts electrically insulated from each other by the non-conducting base-board F and the non-conducting block F'. The journals B B' are also electrically insulated from each other in any convenient manner, as by the cylindrical portion of the drum A, which may be made of wood, as shown in the figures. One of the flanges of the drum A, as *a*, is fitted with gravity-pawls D D', which engage with a suitable slot formed in the block F' when the drum rotates slowly, but in case of a more rapid movement slips by the slot without catching. This construction is essentially the same as that employed in many well-known forms of spring-actuated window-shades and in itself forms no part of the invention.

The lamp or other translating device is attached to the lower or free end of a flexible cord E, within which are two flexible electric conductors *e* and *e'*, insulated from each other. The terminals of the suspended translating device are electrically connected to these conductors, so that the cord E performs the double function of sustaining the translating device

and conducting the electric current to and from it. The opposite terminals of the conductors *e* and *e'* are mechanically secured to the periphery of the drum A and are also respectively placed in electrical connection (through the metallic flanges *a a'* or other equivalent means) with the insulated journals B and B', upon which the drum A turns. A coiled spring G has one of its ends fixed to the frame C and the other to the drum A and tends to turn said drum in the proper direction to wind the cord E thereupon. The circuit-wires *w w'* are attached by clamp-screws *c c'* or other suitable devices to the respective insulated portions of the frame C C', and are thereby placed in electrical connection with the respective journal-bearings and insulated journals B B' of drum A. The whole mechanism is preferably, but not necessarily, inclosed in a sheet-metal case H. When the lamp or other translating device is pulled rapidly down, the gravity-pawls D D' slip past the slot and meanwhile the spring G is wound up. When the lamp is in position, one of the pawls drop into the slot in the block F' and holds the drum and suspended device stationary against the pull of the spring. When it is desired to raise the lamp, the cord is first pulled down, so that the rotation of the drum will disengage the pawl D' from the slot in the block F', and then slackened quickly, so as to permit the drum to be rapidly rotated in the reverse direction by the recoil of the spring G. During this rapid rotation the pawls D and D' successively impinge upon the surface of the block F', and are thereby thrown out of engagement with the slot until such time as the rapid rotation of the drum is checked by a pull upon the cord, when one of said pawls drops into the slot by the action of gravity, as shown at D' in Fig. 2.

I claim as my invention—

The hereinbefore-described adjustable suspension apparatus for electric translating devices, comprising the combination of a base-board of insulating material, two metallic standards affixed to said base-board and insulated from each other thereby, a rotatable drum having its opposite journals insulated from each other and mounted in journal-bearings formed in said standards, one or more

gravity-pawls affixed to said drum and adapted to engage with a slot formed in a block or cross-piece uniting the ends of said standards, a flexible cord containing two electric conductors insulated from each other and connected to the opposite insulated journals of said drum, a spring tending to rotate said drum in a direction to wind said cord thereupon, and means for the attachment of cir-

cuit-wires to said opposite journal-bearings, 10 substantially as set forth.

In testimony whereof I have hereunto subscribed my name this 21st day of September, A. D. 1891.

HARRY D. SISSON.

Witnesses:

CHARLES B. DUNHAM,
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