F. A. BUA.

ILLUMINATING ATTACHMENT FOR MUSIC HOLDERS.

APPLICATION FILED DEC. 2, 1919.

1,352,349. **Patented Sept. 7, 1920.**

2 SHEETS—SHEET 1.

Fig. 1.

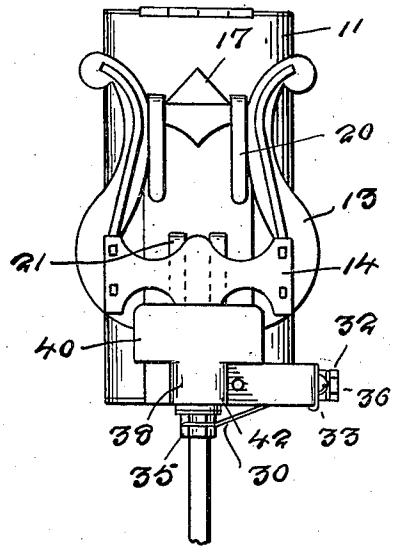


Fig. 2.

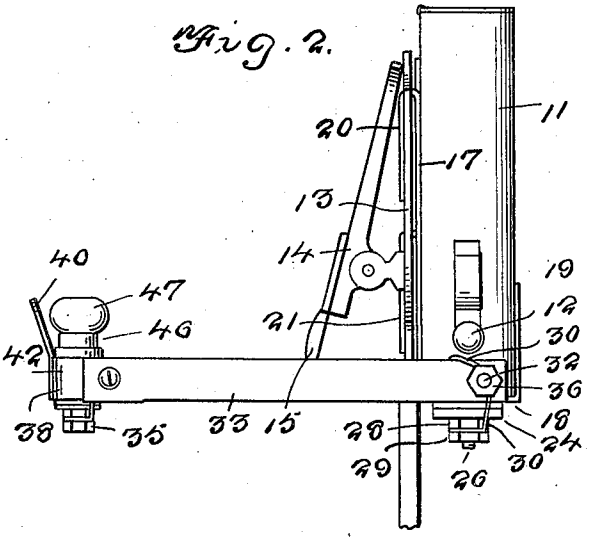


Fig. 3.

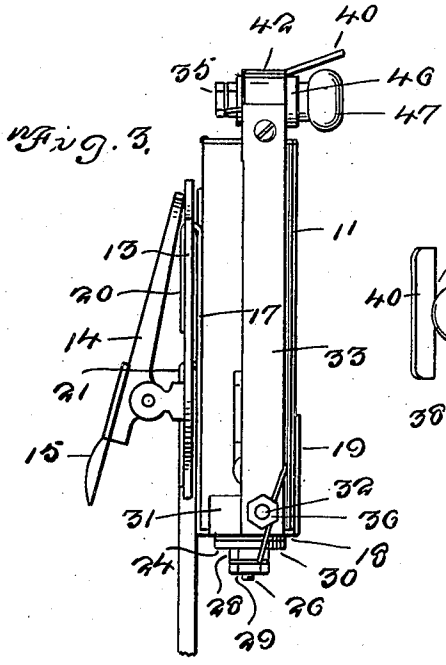
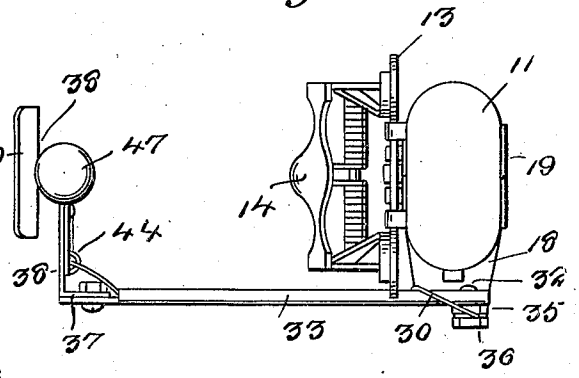


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 5.

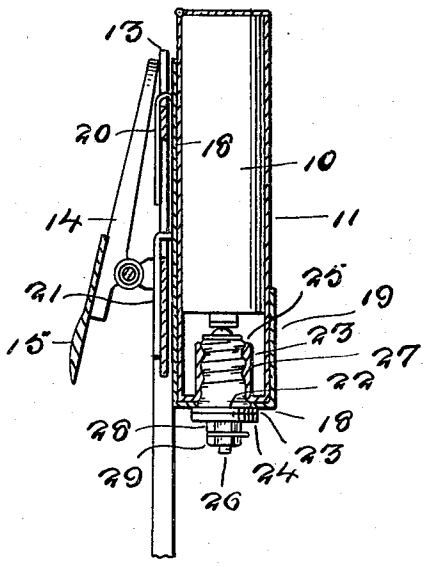


Fig. 6.

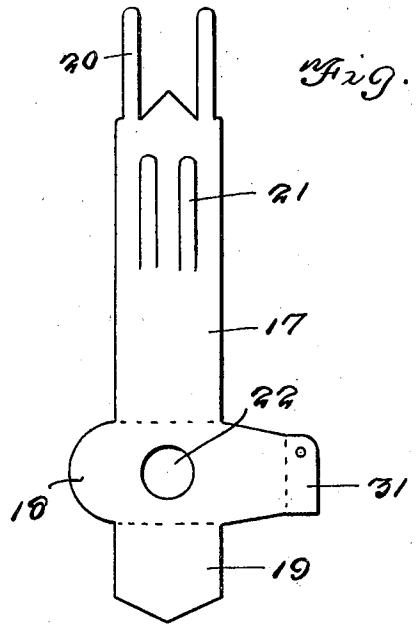


Fig. 7.

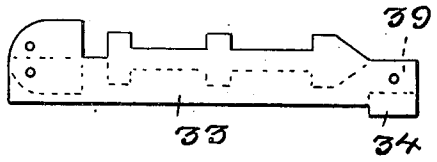
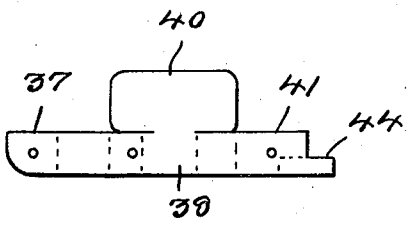


Fig. 8.



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UNITED STATES PATENT OFFICE.

FRANK A. BUA, OF LODI, NEW JERSEY.

ILLUMINATING ATTACHMENT FOR MUSIC-HOLDERS.

1,352,349. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed December 2, 1919. Serial No. 342,019.

To all whom it may concern:

Be it known that I, FRANK A. BUA, a citizen of the United States, residing at Lodi, in the county of Bergen and State of New Jersey, have invented new and useful Improvements in Illuminating Attachments for Music-Holders, of which the following is a specification.

My present invention has reference to an illuminating attachment for music holders.

My improvement is particularly adaptable in connection with that class of music holders which are detachably connected to band instruments, known as music lyres, and has for its object to produce a simple means for illuminating the notes on the sheet of music supported by the lyre.

A further object of the invention is to produce an illuminating attachment for music lyres in which a suitably cased electric battery is employed and to which the improvement is removably attached, the said improvement contemplating means for attaching the same to the lyre and also includes a swinging arm to which the lamp bulb is attached, the said arm being provided with a shield-reflector for the bulb, and when in use is designed to be moved outward and at a right angle with respect to the lyre, and when not in use to be moved against the battery casing.

A further object of the invention is to simplify and improve the music lyre upon which I have obtained United States Letters-Patent No. 1,167,266, granted me on June 4, 1916.

Other objects and advantages will present themselves as the nature of the invention is better understood, reference being had to the accompanying drawings in which there is illustrated a simple and satisfactory embodiment of the improvement reduced to practice.

In the drawings:

Figure 1 is a front elevation.

Fig. 2 is a side elevation.

Fig. 3 is a similar view showing the bulb carrying arm swung over the top of the battery casing.

Fig. 4 is a plan view of the bulb carrying arm being swung to operative position as in Figs. 1 and 2.

Fig. 5 is a sectional view approximately on the line 5—5 of Fig. 3.

Fig. 6 is a view of the blank from which the body member of the improvement is formed.

Fig. 7 is a view of the blank from which the arm is formed.

Fig. 8 is a view of the blank from which the bulb carrying member and shield-reflector is formed.

Carrying a dry cell 10 is a casing 11 of the construction usually employed in electric flash lights. The numeral 12 designates the switch therefor. As the flash light construction is old and well-known in the art, further detailed description thereof will not be attempted, it being deemed only sufficient to state that the bulb is detached from the casing 10, and of course out of contact with one of the bulbs of the dry cell.

The flash-light is designed to be attached to the rack member 13 of a music holder of the class commonly referred to as music lyre. The rack it should be stated includes side arms that are connected by upper and lower arms, while at the lower end of the rack are the upwardly extending fingers to which is pivotally connected the shaft of the spring clamp 14, the said shaft being spring influenced in the usual manner and the flat lower portion of the clamp is provided with the usual thumb piece 15. The rack 13 is provided with the support standard 16 that is removably attached to the instrument.

My improvement comprises a holder member which, as disclosed in Fig. 6 of the drawings is formed from a single piece of metal stamped to provide a front plate 17, a bottom 18 and a back plate 19. The bottom 18 is wider than the front and back, and the back 19 is shorter than the front 17. The supporting member is constructed of metal and therefore embodies a natural resiliency, so that the back 19 and the front 17 exert a tension toward each other. As a matter of fact the back 19 is in the order of a spring tongue. The front of the support, at the upper edges thereof and adjacent its corners is formed with parallel fingers 20, which are bent over the front and provide spring members that engage with the upper bar of the rack 13. The front plate 17 is provided with spaced longitudinal slits and lower transverse slits at the ends of the longitudinal slits, and the metal bounded by the said slits is bent outwardly

to provide spring fingers 21 which engage from the lower transverse member of the rack 13.

The bottom 18 is provided with a central opening 22 that may be and preferably is surrounded by an out-turned flange 23. The bulb for the lamp, as previously stated is removed, and in the flanged opening 22 there is arranged a fibrous non-electric conducting washer 24. The contact member for the positive pole of the dry cell 11 is contacted by a post 25 that may be in the nature of a screw and which passes through the washer 24 and a tubular threaded extension 26 of the said washer, the latter threadedly engaging the socket 27 in the casing that is provided for the lamp bulb. The screw 25 passes a suitable distance outward of the washer and has threaded thereon an inner nut 28 and an outer binding nut 29. The inner nut 28 contacts with the washer, and between the nuts is a conducting wire 30.

The bottom 18 of the support has one of its ends flanged upwardly as at 31, and pivotally secured to this flange as at 32, is an arm 33. The arm, as disclosed in Fig. 7 of the drawings is formed of a single strip of material which is of a bendable nature, and which preferably has one of its edges notched at pre-determined intervals and one of its corners, opposite the said notched edge is formed with a lateral extension 34. The member 33 has its notched portion bent over the side thereof, so that one of the inner corners of the arm is provided with two lapping portions disposed over opposite sides of the flange 31 and through these lapping portions the pivot 32 passes. From this arrangement it will be noted that the arm when swung outwardly of the support will be held at a right angle with respect to the support.

The pivot 32 is in the nature of a headed screw and is engaged by an inner nut 25 and a binding nut 26, and between these nuts is held the wire 30. The wire 30 is also held between the remaining bent portions of the arm so that the said wire is conducted longitudinally of the arm and properly housed. The extension 34 is bent inwardly so that the outer end of the arm 33, at the lower portion thereof is U-shaped. In this U-shaped outer end of the arm there is received an ear 37 formed on one end of the combined bulb hold and reflector member 38. The member 38, as disclosed in Fig. 8 of the drawings is formed from a single blank of material, the ear 37 being bent at a right angle with respect to the body of the member. The ear is pivoted in the channeled end of the arm as indicated by the numeral 39 so that the member 38 is retained at a right angle with respect to the arm and is hingedly connected thereto, and consequently the member 38 may be retained at desired angles with respect to the arm and with respect to the lyre when the device is attached thereto.

The shield for the member 38 is indicated by the numeral 40, being arranged laterally and extending from one of the edges of the strip that provides the body of the said member 38. The upper edge of the strip is slitted inwardly of the shield, the said slits terminating a suitable distance from the center of the shield, so that the member 38 is thus provided with inner and outer arms. For distinction the outer arm is indicated by the numeral 41 and the member 38 centrally between the arms is rounded upon itself to provide a socket 42, and the arm 41 is continued inwardly of the inner arm, indicated by the numeral 42 and secured to the said inner arm. The outer arm 41 at its lower corner is provided with a reduced extension 44 which is rounded upon itself to provide a guide for the wire 30 which is directed to a binding post 35 on the socket portion 46 of the bulb 47.

The inner face of the shield 40 may be polished so that the same serves as a reflector. By operating the switch 12 the current from the dry cell will flow through the bulb to be returned through the member 38, arm 33 and the holder member to the casing 10 to complete the circuit. The bulb may be retained at any desired angle so that the rays of light therefrom will be properly directed over the music held by the lyre. The pivot between the arm and the bottom of the holder is adjustable so that a proper frictional engagement from these parts may be readily obtained. This is essential as it will be found desirable to retain the arm at various angles to properly direct the rays of light from the bulb on to the sheet of music, and also because the arm 33 is to be held longitudinally of the casing 10 and the bulb over the top of the casing when the device is not in use. The improvement is of a size whereby the same may be conveniently held in the pocket of the musician, when it may be easily attached to or removed from the lyre and it is believed that the advantages of the improvement will be apparent to those skilled in the art to which such inventions appertain without further detail description.

Having thus described the invention, what I claim is:—

An illuminating means for sheet music holders, including a battery, a support including front and back members, and a bottom connecting said members receiving the battery, and said support being in contact with one of the electrodes of the battery, a flange on one end of the bottom, an arm pivoted thereto and designed by con-

tact with said bottom to be limited in its swinging movement in two directions, said arm having a flange on one side thereof, a guide housed therein and connected to the second electrode of the battery, an angle member pivotally secured to the outer end of the arm and having a socket receiving a lamp bulb to the terminal of which the said wire is connected, guide means carried by the latter member for the wire, an integrally formed reflector having a bulb on said member, and the front plate of the support having integral spring fingers for engaging with the music holder.

In testimony whereof I affix my signature.

FRANK A. BUA.