Nov. 24, 1970 S. I. MIHAILOFF 3,543,017

LIGHTING ARRANGEMENT FOR KEYBOARD INSTRUMENTS

Filed June 28, 1968 2 Sheets-Sheet 1

FIG_1

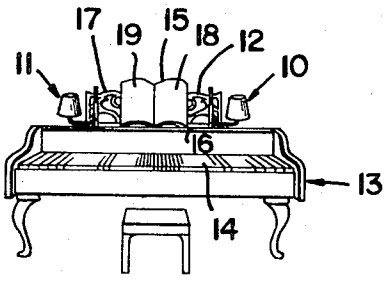


FIG_2

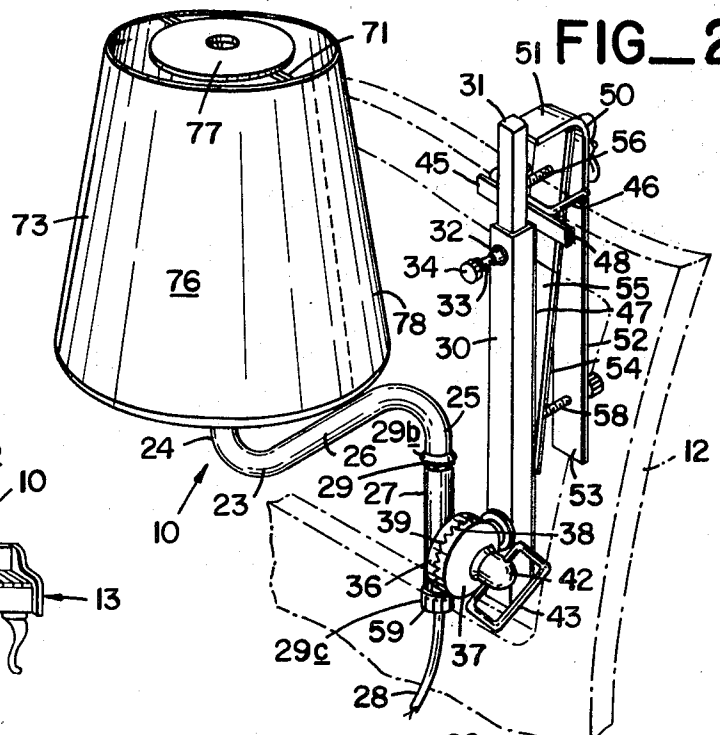


FIG_10

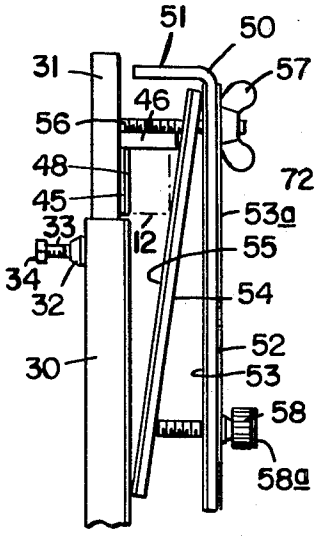


FIG_5

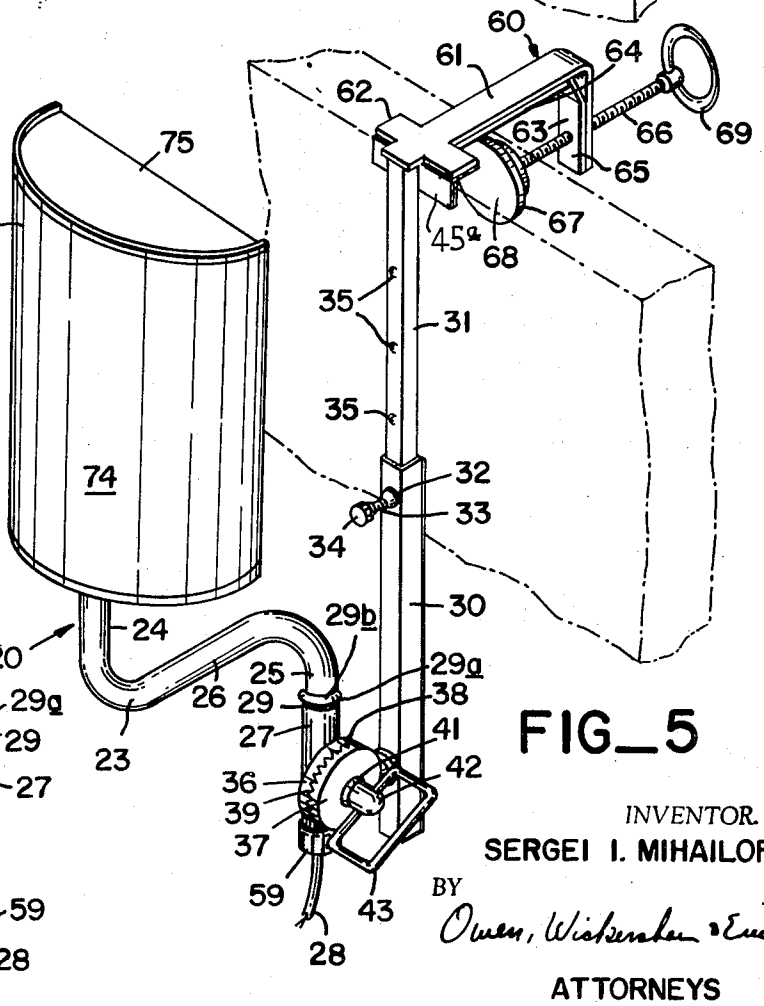
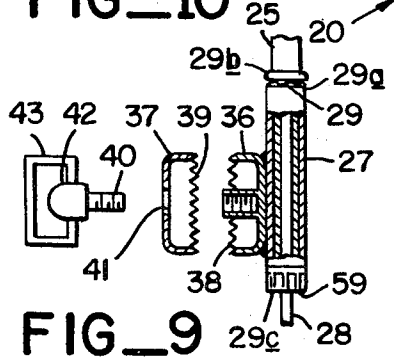


FIG_9



INVENTOR.
SERGEI I. MIHAILOFF
BY
Owen, Wisenberg & Enchan
ATTORNEYS

Nov. 24, 1970 S. I. MIHAILOFF 3,543,017

LIGHTING ARRANGEMENT FOR KEYBOARD INSTRUMENTS

Filed June 28, 1968 2 Sheets-Sheet 2

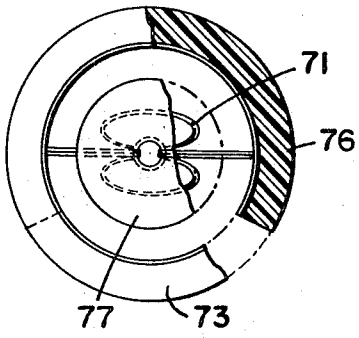


FIG_4

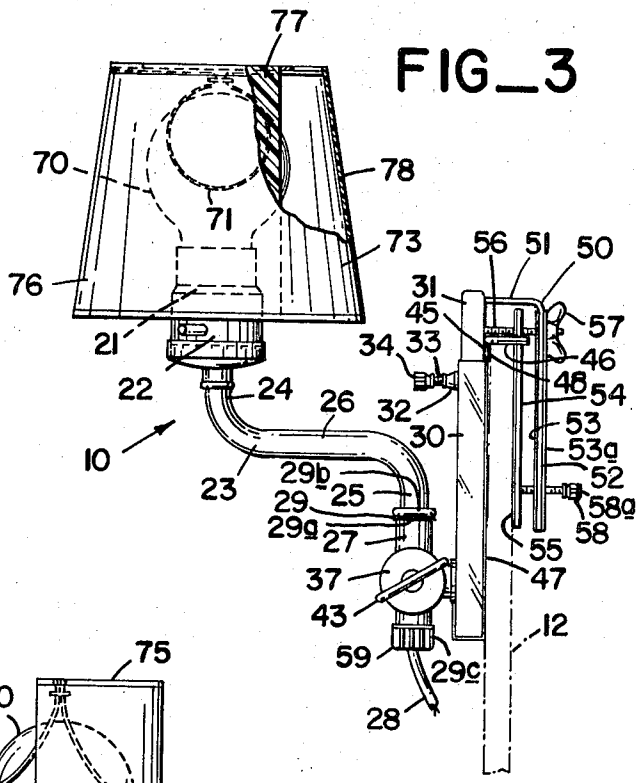


FIG_3

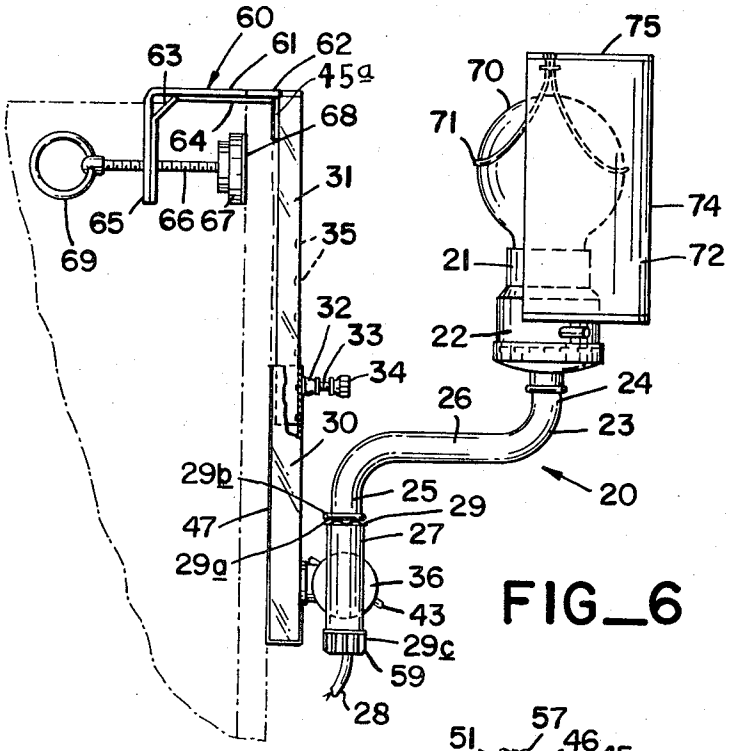


FIG_6

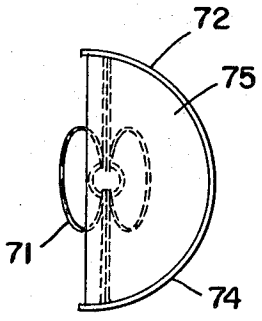


FIG_7

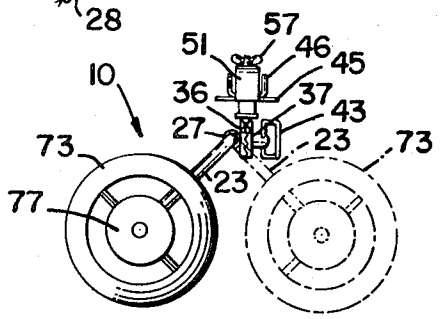


FIG_8

INVENTOR.
SERGEI I. MIHAILOFF

BY

Owen, Wickersham & Erickson

ATTORNEYS

United States Patent Office

3,543,017
Patented Nov. 24, 1970

3,543,017

LIGHTING ARRANGEMENT FOR KEYBOARD INSTRUMENTS

Sergei I. Mihailoff, 2820 Baker St., San Francisco, Calif. 94123

Filed June 28, 1968, Ser. No. 741,000
Int. Cl. F21v 33/00, 21/08
U.S. Cl. 240—4 18 Claims

ABSTRACT OF THE DISCLOSURE

A piano lamp fixture. A shade or shield provides an opaque portion which protects the player's eyes from the direct light of its bulb, while the light shines on the music rack and on the keyboard. Each lamp fixture has a clamp secured to the piano; a pair of generally vertical members lie one on each side of a piano portion. A tube telescopically mounted to one of these members has a set member to lock the tube in any of several positions relative to its companion member. A swivel clamp has a member secured to the lower end of the tube and attached to a second engaging member for relative rotation about a horizontal axis and lockable to it in any rotational position. A vertical swivel socket is secured to the second engaging member, and a crank-shaped lamp-supporting arm has a lower vertical portion fitting snugly and rotatably in the swivel socket and a horizontally offset upper vertical portion supporting a lamp bulb socket at its upper end. The height of the lamp socket is adjusted by the tube, the angle of inclination of the vertical portions of the arm is adjustable by the swivel clamp to enable the horizontal portion of the arm to be parallel to the keyboard, and the lamp bulb socket is movable toward and away from the vertical centerline of the music rack by swiveling the lower vertical portion in the swivel socket.

This invention relates to an improved lighting fixture combination for use with all kinds of keyboard instruments, including pianos, organs, and harpsichords.

Pianos were invented and came into use during the 18th century and were brought to a high state of development during the 19th century. They were preceded not only by harpsichords, clavichords, and other types of keyboard instruments which until recently had been considered obsolete, but also by organs, which had been in use for centuries and had been highly developed during the baroque period. During all this time, the performer on keyboard instruments was expected to read music at the instrument, at least during practice. While at the present time, the performer of keyboard concerts and of solo recitals is usually expected to play from memory, there are many occasions, including performances of chamber music and the use of organs in churches, where the printed music is conventionally used, and during practice, especially when learning new pieces, the printed music must usually be before the pianist or organist. However, in spite of the tremendous progress in lighting during the past one hundred years, piano lights have remained quite unsatisfactory, and organ lights have been little better, if any. Primarily, the difficulties have

been that the music has not been evenly lighted, sometimes not sufficiently lighted, and that much of the light has been directed into the eyes of the performer or of his audience.

Also, it is desirable to have sufficient illumination on the piano keyboard for the player to be able to see the keys clearly, and this has often been overlooked in attempting to light the music on the rack.

Various lighting expedients have been proposed, but they have failed to solve the problems. For example, lights have been placed beneath the sheet music by having the music-holding rack include a translucent base with a light below it or by having a light just forward of an opaque base. However, as is well know, light falls off in intensity according to the square of the distance from its source, so that the bottom of the page in such devices has been many times brighter than the top of the page. Also, some of these lights have sent light into the eyes of the performer. Furthermore, such lights give almost no light on the keyboard, or light only a portion of the keyboard, and make it difficult for the performer to see what he is doing.

Similarly, lights have for an even longer time been placed at the top of the music rack, generally with a shield intended to protect the player's eyes from direct light, although often these shields have been ineffective. In any event, the problem of uneven lighting has existed here too, that is, the top of the music has been lighted many times more brilliantly than the bottom of the music. Whether the light has come from the bottom or the top, it has been impossible to equalize the light intensity on the page. The light on the keyboard is very dim and in some instances is practically nonexistent. When the keyboard is not otherwise illuminated it is especially difficult for learners to find their keys easily.

Lights at the side have heretofore been no better, and as a result pianists have generally had to rely upon light from windows during daytime, bridge lamps standing behind the pianist, ceiling lights, and general indirect lighting, and often these conventional arrangements have provided too little light on the music pages and have resulted in many sad effects, including injury to or strain on the eyes of the player when practicing, chronic inability to play music correctly because of the difficulties involved and the mental blocks occasioned by trying to read music which has been too difficult to see properly, struggling to locate badly illuminated keys on the piano, the forming of bad posture, and many other things. Some of the known unwillingness of many children to practice has been traced to the fact that the lighting was bad and that it was a strain on their eyesight for them to be forced to practice. Also, when the room illumination happens to be adequate for the player, it is usually too bright for others in the same room and it becomes unpleasant to sit and listen.

In addition to these difficulties, directly concerned with the inadequacy and unevenness of the light and the glare of it into the eyes of various people, there has been another difficulty. Piano makers have not given any attention to adequate structure for supporting lights. Even the best pianos are not supplied with them, possibly on the theory that these best pianos are going to be used mainly for performances by memory. But this is hardly the case, for even the greatest musicians habitually read the music

when they practice. The music racks have generally been inadequate for supporting the kinds of lights that have been proposed heretofore, even though these lights have usually been unsatisfactory anyway. Also, the wide differences in structure between grand pianos, baby grand pianos, upright pianos, and spinets, and between the same kinds of pianos as made by different manufacturers, to say nothing of a similar wide variety among organs and modern harpsichords, have made it difficult to design any sort of lighting fixture that could be attached to more than one specific instrument. The consequent unavailability of any such fixture because of, apparently, very limited markets or a necessity to proliferate models of such fixtures if the large market is to become possible, has left the field to general house lighting or bridge-type lamps. Table lamps suitable for placing on a piano have generally been worse than useless.

Furthermore, each individual may require a slight adjustment in the light, and each individual instrument tends to require individual adjustment in the position of the light fixtures, so that it has been difficult for anyone to provide a lamp fixture which was satisfactory for all kinds of keyboard instruments.

The present invention is directed to the solution of these difficult problems, and it is believed to have in large measure solved them. It presents a type of piano lighting which basically relies on two side lights coupled with a shield, so that the light is directed onto the music from each side of the music and so that the light is not directed into the eyes of the performer. By using two light bulbs properly located on each side of the music rack, the fall-off in intensity from one bulb is balanced by the opposite bulb, so that the light is substantially uniformly distributed over the sheet of music, and the middle of the sheet is substantially as well lighted as the edges. By the use of shielding or shades having an opaque portion, the performer's eyes, as well as those of others in the room may be protected from direct exposure to light from the bulb. At the same time, a good light, not too bright, is thrown on the keyboard.

An important feature of the fixtures of this invention is the adjustability of all forms thereof. As a result only two forms thereof are needed to provide adequate illumination for all types of keyboard instruments known to me. One type is used for baby grand pianos, grand pianos, spinets, and so on, as well as for many organs and harpsichords, while another form is used for upright pianos. Basically, these two forms have much in common, with the differences lying in the direct supporting member which is clamped to the piano or organ or harpsichord. The lamps themselves are mounted on offset arms set in a swivel so that they can be swung into any desired position; the swivel itself is supported on the bottom of a vertically adjustable member so that the vertical position of the bulb can readily be adjusted; and a telescoping vertical member which cooperates therewith is mounted for cooperation with the clamping arrangement which mounts it to the piano itself.

Other objects and advantages of the invention will appear from the following description of some preferred forms thereof.

In the drawings:

FIG. 1 is a reduced view in front elevation of a grand piano with lighting apparatus embodying the principles of the invention installed thereon.

FIG. 2 is an enlarged view in perspective of a lighting fixture for the piano of FIG. 1, a portion of the music rack of the piano being shown in broken lines. The fixture is shown in its uppermost position.

FIG. 3 is a view in side elevation of the fixture of FIG. 2 with a portion of the shade broken away to disclose its structure better. A solid music rack is shown in broken lines.

FIG. 4 is a top plan view of the shade of FIG. 3, partially broken away and shown in section.

FIG. 5 is a view similar to FIG. 2 of a modified form of lamp fixture for installation on an upright piano with a portion of an upright piano shown in broken lines. This fixture is shown in a lower, extended position, the parts enabling vertical movement being the same in both FIGS. 2 and 5.

FIG. 6 is a view in side elevation of the lamp of FIG. 5 with the piano portion again shown in broken lines.

FIG. 7 is a top plan view of the lamp shield employed in FIGS. 5 and 6.

FIG. 8 is a top plan view of the lamp fixture of FIG. 3 showing how the lamp may be moved laterally, the lamp being shown in solid lines swung to the left and in broken lines swung to the right.

FIG. 9 is an exploded fragmentary view of the two direction swivel arrangements of the fixtures of FIGS. 2 to 6.

FIG. 10 is a fragmentary view of an application of the clamping structure of FIGS. 2 and 3 to an open-work music rack, like that of FIGS. 1 and 2.

As shown in FIG. 1, a complete lighting arrangement of this invention incorporates two lamps **10** and **11**, i.e., two separate lighting fixtures, one on each side of the music rack **12** of the piano **13**. The grand piano **13** has a keyboard **14**, and the music rack **12** is located above the keyboard **14** and three to seven inches to the rear; a sheet **15** of music is shown unfolded on the rack **12**. The music rack **12** includes a bottom support **16** for the music **15** and an inclined back portion **17** against which the music **15** is held in the properly inclined position. This being a grand piano, the lamps **10** and **11** of this invention are installed on and held by the music rack **12**, in a manner which will be explained in connection with FIGS. 2 and 3. Since one lamp **10** or **11** is at each side of the music **15**, the light which emanates from the lamp **10** is brighter on the right page **18** than on the left page **19** of the music **15**, but its uneven illumination is balanced by the lamp **11**. The fact that there are two lights causes the light intensity in the middle of the sheet **15** to be substantially the same as what it is at the edge of each of the pages **18** and **19**. By properly adjusting the lateral distance of the lamps **10** and **11** from the sheet **15**, proper intensity and evenness of intensity are readily attained. The light on the keyboard is also somewhat balanced and is quite sufficient and without reflective glare.

The fixtures of this invention are of two main types: the substantially identical lamps **10** and **11** for grand pianos, baby grand pianos, spinets, etc., and a lamp **20** for upright pianos. oBth types of fixtures are clamped to a portion of the piano and both of the menable substantially the same adjustments of light position.

The lamp **10** is shown enlarged in FIGS. 2 and 3 and, somewhat smaller, in FIG. 8. The lamp **20**, in many ways identical to the lamp **10**, is shown in FIGS. 5 and 6. Each such lamp **10**, **11** or **20** includes a socket **21** and switch base **22** at the end of a crank-shaped arm **23** having an upper vertical portion **24** and a lower vertical portion **25** connected by a generally horizontal portion **26**. The vertical portion **25** is mounted in a swivel socket **27** so that the arm **23** can be swung around its vertical portion **25** as a pivot to place the socket **21** in any desired rotary position. The fit of the portion **25** in the swivel socket **27** is made sufficiently snug by a steel spring washer **29** bearing between the upper edge **29*a*** of the socket **27** and an annular rib **29*b*** on the portion **25** and acting against a bushing **29*c*** secured to the bottom of the portion **25**, so that the arm **23** will retain any position to which it is swung. This enables adjustment of the light relative to the edges of the sheet **15**. An electric cord **28** goes up through the arm **23** to the switch base **22**.

The vertical position of the light is determined by two keyed telescoping members, such as a square outer tube **30** and a square rod **31** that fits inside the tube **30**. A threaded socket **32** is secured, as by welding, to the square tube **30**, so that a set screw **33** with a knurled end **34** may be used to

tighten and lock the tube **30** to the rod **31** in any vertical position. A series of depressions **35** in the rod **31** may provide more secure locking of the set screw **33** at spaced locations. Nearby extreme positions of the tube **30** and rod **31** are shown in FIGS. 2 and 5 and in FIGS. 3 and 6.

Fore-and-aft tilting of the swivel socket **27** and arm **23** is provided (see FIGS. 9 and 2) by two round disc-like or cup-like members **36** and **37** with serrated surfaces **38** and **39**. The member **36** is attached rigidly (as by welding) to the swivel socket **27**, and the other member **37** is rigidly secured to the square tube **30**. The two pieces **36** and **37** are aligned together by a threaded stud **40** which is secured to the interior surface of the first disc or cup **36** and projects out through an opening **41** through the second disc of cup **37**. When a wing nut **42** is turned, as by a handle **43**, it bears against the second disc **37** and forces the member **37** against the member **36**. When the nut **42** is loosened, the first disc **36**, together with the vertical socket **27** and the arm **23** can be rotated about the stud **40** as a horizontal axis to any desired position vertical or tilted. Then, when the wing nut **42** is tightened, the parts can be held in that position. The preferred position is one where the arm portion **26** is parallel to the keyboard **14**, i.e., horizontal.

As described so far, the lamp **10** of FIGS. 2 and 3 and the lamp **20** are identical. The differences lie in the clamping arrangements now to be described. As shown in FIGS. 2, 3, 5, 6 and 10, the inner telescoping rod **31** is provided near the top, at a location spaced down from the top, with a flat cross plate **45** which extends widthwise of the member and is adapted to engage the front of the music rack **12**. Similarly, a horseshoe-like member **46** is also secured and is adapted to rest on the top edge of the music rack **12**, as shown in FIG. 3. Since pianos are fine pieces of furniture, both the inner face of the square tube **30** and the inner face of the cross plate **45** are preferably faced with a soft leather strip **47**, **48** of a suitable color to match artistically with the color of the metal members **30** and **45** themselves and to protect the furniture from being scratched or marred. Likewise, the horseshoe shaped member **46** is preferably encased in a clear plastic tubing or other soft member so that it will not cause any scratching.

Cooperating with these parts is a bracket assembly made of a combination of pieces, including an L-shaped flat bar **50** having a short forwardly extending portion **51** at its upper end and a longer vertically extending portion **52**, which may have inner facing of leather strip **53** and, preferably, an outer facing **53***a*, also of leather strip. Between the bar **31** and bar **50** is a middle plate **54**, a flat bar preferably faced on its inner surfaces with a soft leather **55** or other suitable soft surface. A threaded stud **56** secured to the square rod **31** above the horseshoe-like top stop **46** extends through oversize openings near the upper ends of both the middle plate **54** and the bar portion **52**, and a wing nut **57** is threaded on it to enable tightening thereof. A machine thumb screw **58** is threaded through an opening near the lower end of the portion **52** and extends into engagement with an indentation in the middle plate **54**. Preferably the head of the screw **58** is covered on its outer end with a soft leather facing or pad **58***a*. This structue makes it possible to clamp the fixture **10** tightly to the music rack **12** without scratching or in any way damaging the fine finish of the piano or causing any sympathetic vibrations, since all the members which are in contact with the rack are faced with a soft leather. The structure described above makes it possible to adjust a fixture **10** which may be stocked in a store to various music racks with different thicknesses, heights, and so on, and there is a wide variety of such racks in use on pianos and other keyboard instruments. It almost seems sometimes as though no two manufacturers have quite the same ideas for music racks, but this particular structure fits all of them satisfactorily and obtains the desired clamping.

It should be appreciated that although FIGS. 2 and 3 seem to indicate a vertical position, the rack **12** is actually inclined. Since the lamp **10** itself may in some instances be heavier than the music rack **12**, two such lamps **10** and **11** may very well over-balance the music rack **12**; so, in such instances, the square tube **30** should be extended out from the position shown in FIGS. 2 and 3, and lowered, somewhat as shown in FIGS. 5 and 6 to a position where the lower end **59** rests on the horizontal portion **16** of the music rack.

To attach the lamps **10** and **11** to a grand, baby grand, console or spinet piano or to an organ, one starts by noting that the only difference between the lamps **10** and **11** is the location of the vertical swivel discs or cups **36** and **37** and the key or handle **43** for them. In the left light fixture **10**, the key **43** preferably faces the left side of the piano, and in the right fixture, the key **43** preferably faces the right side of the piano. The clamp wing-nut **57** is turned until the opening between the middle strip **54** and the square rod **31** is sufficiently wide for the clamp assembly to fit over the top of the music rack **12**. The strip **54** is placed behind the rack **12**, with the square rod **31** in front, and the strips **54** and **52** are, for most music racks, parallel to the rod **31** and tube **30**; with some music racks (see FIGS. 2 and 10), the strip **54** is at an angle to the music rack **12**. The horseshoe-like prong wings **46** rest on the upper edge of the rack **12**, and the bar **45** steadies the upper end of the assembly. The tube **30** is extended to the desired length; as said, for a fragile music stand **12** that tends to fall forward when supporting the lamps **10** and **11**, the tube **30** is brought down so that its lower end **59** rests on the portion **16** of the music rack **12**. The thumb screw **33** is then tightened firmly. The thumb screw **58** is tightened so that the lower end of the strip **54** moves in; for an open-work music rack **12** like that in FIGS. 1 and 2, the strip **54** is set at an angle to engage the rod **31** or tube **30**, as shown in FIG. 10. In a solid rack **12**, as in FIG. 3, the structure is as shown there. The swivel key **43** is turned and tightened to make the arm portion **26** preferably parallel to the keyboard **14**. The arm **23** is then swung to any desired position. The arm **23** may be made in different lengths, depending on the distance between the music rack and the keyboard.

An upright piano can accommodate a somewhat similar structure. These pianos have a generally box-like structure enclosing the vertically assembled strings, with a top lid thereon. In this invention the lid is temporarily lifted or opened. In this instance, as shown in FIGS. 5 and 6, the inner telescoping member, the square rod **31**, is welded to a generally L-shaped member **60** which provides a top horizontal portion **61** with arm wings **62** to get a good grasp on the top surface of the front board of the upright piano's box. A flat cross plate **45***a*, leather lined as in the device of FIGS. 2 and 3, extends widthwise of the inner telescoping rod **31** and is adapted to engage the top part of the front board. This plate **45***a* aids in aligning the clamp with the square tubing **30** and keeps the clamp bar **61** from rising when the front board is in an inclined position. The member **60** as shown in FIG. 6 provides a vertical portion **65** parallel to and spaced from the square bar **31**. This portion **65** may be of double thickness with an inner angular portion **63** to give adequate strength, and is lined with a soft leather facing **64**. A single threaded member **66** has a clamp portion **67** padded by a soft leather pad **68**, and has a handle **69**. Thus the clamp surface pad **68** is forced into contact with the box, as is the upper lined portion of the telescoping rod **31**, and, again, a very secure attachment is made thereby. The adjustment of height is made as before, but in this instance it depends more on the location of the music, since the upright piano provides a far more stable supporting surface than does the ordinary music rack of a grand piano.

The arm **23**, swivel assembly **27**, **36**, **37** etc., square

tube **30**, square rod **31**, and clamp members **50**, **54**, and **60** may be made from any suitable material, including brass or steel.

A globe **70** is screwed into the lamp socket **21** and a shade or shield set on top, supported by the globe **70** by a spring clip fixture **71**, preferably. Either fixture **10** (FIG. 1) or **20** (FIG. 5) may be provided with either a shield **72** or a shade **73**. The shield **72** leaves the round lamp bulb **70** exposed on its rear portion and covers with an opaque portion **74** approximately 180° (or preferably slightly more up to about 270°) of the side and at least 180° of the top by an opaque portion **75** so as to give protection to the eyes of the player and other people who may be in the room, while sending the light out practically unimpeded to the music and to the keyboard.

Similarly, the lamp shade **73** has an opaque side wall portion **76** which may occupy half or two-thirds of the perimeter of the lamp shade, and an opaque metal disc **77**, about three inches in diameter, whereas a translucent portion **78** occupies the remaining portion of the shade. Preferably the lamp shade **73** is frustoconical, with a wider bottom, to illuminate the keyboard better, and a narrower top to hold down the light there.

To those skilled in the art to which this invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the spirit and scope of the invention. The disclosures and the description herein are purely illustrative and are not intended to be in any sense limiting.

I claim:

1. A lamp fixture for use on a keyboard musical instrument to illuminate the music on a music rack of said instrument and to illuminate the keyboard thereof, comprising:

clamping means secured to a portion of said instrument, said clamping means comprising a pair of generally vertically extending members, one on each side of said portion;

a tube telescopically mounted to one said vertically extending member and having a set means to lock said tube in any of several positions relative to the member with which it telescopes;

swivel clamp means comprising a pair of engaging members, one secured to the lower end of said tube and attached to the second engaging member for rotation relative thereto about a horizontal axis, with means locking said engaging members together in any rotational position;

vertical swivel socket means secured to said second engaging member;

a crank-shaped lamp supporting arm having a lower vertical portion fitting snugly in said swivel socket for rotation therein and an upper vertical portion joined to the lower vertical portion by an offsetting generally horizontal portion, and a lamp bulb socket at the upper end of said arm, whereby the height of said lamp socket is adjusted by said tube, the angle of inclination of said vertical portions of said arm is adjustable by said swivel clamp to enable said horizontal portion of said arm to be parallel to said keyboard, and said lamp bulb socket is movable toward and away from the vertical centerline of said music rack by swiveling of said lower vertical portion in said swivel socket.

2. The lamp fixture of claim **1** wherein said swivel clamp means include a threaded stud secured to one said engaging member and extending through the other said engaging member and a locking nut with a handle for tightening said engaging members together.

3. The lamp fixture of claim **1** wherein said lamp bulb socket includes switch means.

4. The lamp fixture of claim **1** in which said clamp means includes a said pair of vertically extending members, in addition to the member about which said tube telescopes, an L-shaped flat member secured to the upper end of said member about which said tube telescopes and has a generally horizontal portion adapted to rest on the upper edge of a portion of said instrument, and a depending lower portion having a threaded opening therethrough, a threaded member threadably engaged in said threaded portion and having a clamp portion at one end facing the member about which said tube telescopes.

5. The lamp fixture of claim **1** wherein all surfaces of said clamping means in contact with the instrument are faced with soft non-scratching material to protect the finish of the instrument and to prevent sympathetic vibrations.

6. The lamp fixture of claim **5** wherein said soft non-scratching material is soft leather.

7. The lamp fixture of claim **1** wherein said tube is square and the member about which it telescopes is a square rod.

8. The lamp fixture of claim **7** wherein said set means comprises a thumb set screw.

9. The lamp fixture of claim **8** wherein said square rod is provided with a vertically aligned series of depression to receive the end of said set screw.

10. The lamp fixture of claim **1** having a frustoconical lamp shade mountable by clip means on a bulb in said bulb socket and having light transmitting portions on the wider bottom and one side portion for illuminating said keyboard and music rack and opaque portions on another side portion and on the narrower top for shielding the eyes of the performer and of others from direct rays of light from a said bulb.

11. The lamp fixture of claim **10** wherein said shade comprises an opaque shield partially encircling the lamp bulb and full open for the light transmitting portions.

12. The lamp fixture of claim **10** wherein said lamp shade provides said light transmitting side portion by a translucent portion of a circular shade having said opaque portion as another portion thereof.

13. The lamp fixture of claim **12** wherein the opaque portion occupies approximately two-thirds of the vertical shade area.

14. The lamp fixture of claim **12** wherein the opaque portion occupies approximately one-half of the vertical shade area.

15. The lamp fixture of claim **1** wherein said clamp means includes as said pair of vertically extending members, in addition to the member about which said tube telescopes, a flat L-shaped rear member and a flat central member, the L-shaped member having at the top a generally horizontal portion extending forward toward said telescoping members and having a vertical portion with a pair of openings therein, an upper oversized one near the top and a lower threaded one near the bottom, the flat central member having an oversized opening matching the upper said oversized opening, a stud extending from the member about which the tube telescopes through both said oversized openings, wing nut means bearing on the vertical portion of said L-shaped member and threaded on said stud, and a thumb screw threaded through said threaded lower opening and bearing on said flat central member, said flat central member and said tube serving to clamp said fixture to a music rack of said instrument and having soft padded surfaces engaging said music rack.

16. The lamp fixture of claim **15** wherein said flat central member has a depression engaged by the end of said thumb screw.

17. The lamp fixture of claim **15** wherein a horseshoe-like member is secured to the member about which said tube telescopes and has prongs extending toward said L-shaped member, said prongs being covered with soft compressible material, for engaging the upper edge of a said music rack.

18. The lamp fixture of claim 17 wherein a cross plate is secured just below said horseshoe-like member of the said member about which said tube telescopes, for engagement with the top of said rack.

References Cited

UNITED STATES PATENTS

39,438	8/1863	Wellman	240—108
1,413,520	4/1922	Darling	240—108 X
1,587,388	6/1926	Lieberman	240—4
2,107,914	2/1938	Stricker et al.	240—4
2,406,029	8/1946	Nettesheim	240—4 X
2,437,825	3/1948	Kohn	240—108
2,680,317	6/1954	Lewis	240—108 X

JOHN M. HORAN, Primary Examiner

K. C. HUTCHISON, Assistant Examiner

U.S. Cl. X.R.

240—52.1, 73, 108