

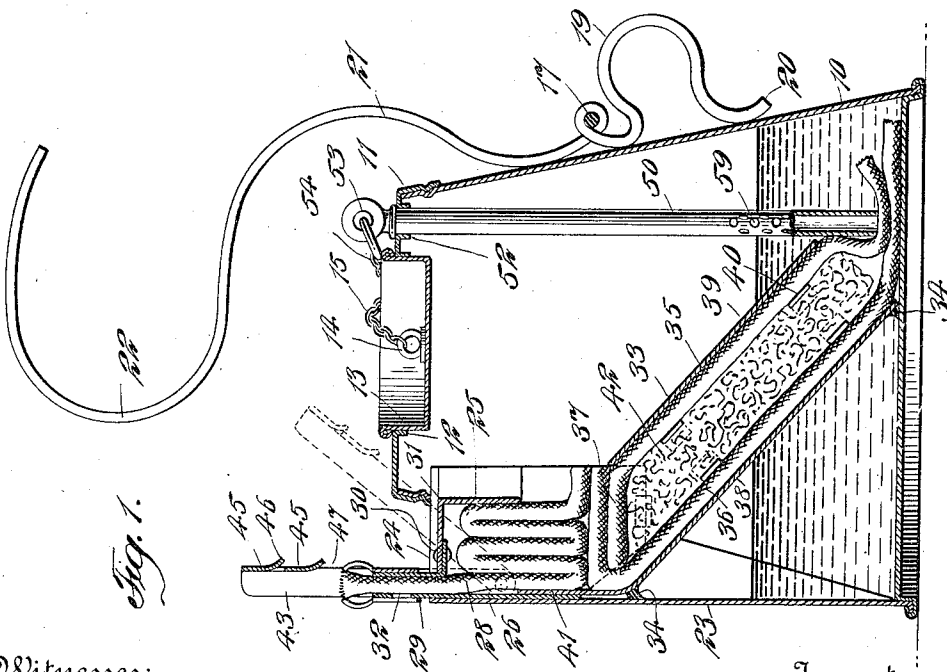
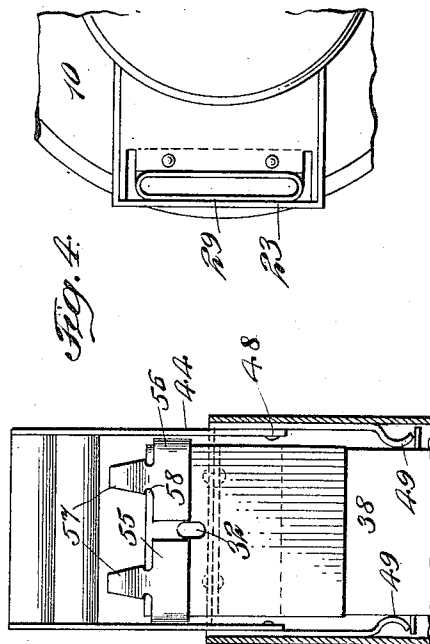
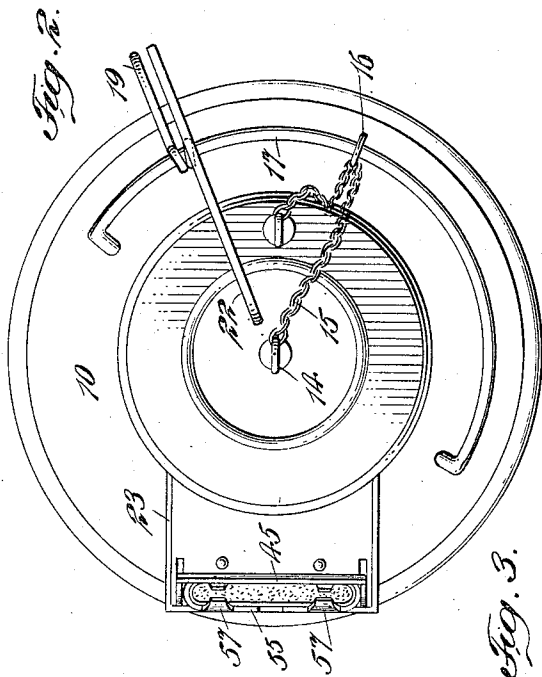
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LAMP.

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Patented Apr. 29, 1913.



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LAMP.

1,060,315.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRY BROUSSEAU, a citizen of the United States, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Lamps, of which the following is a full, clear, and exact description.

This invention relates more particularly to lamps adapted to burn a heavy or congealable material.

The primary object of the invention is to provide a simple and efficient lamp in which a congealable material, as wax, may be quickly heated by a preliminary heating means to liquefy the same sufficiently to feed the wick and the heat transmitted to the body of the lamp independent of said means to properly melt the main body of the wax or other material without the liability of the said heating means being coated with carbon which is very objectionable and which results in the form of means ordinarily employed for such purposes.

Other objects of the invention are to provide a lamp in which the lighting wick is independent of the means for feeding the material thereto; to provide simple and efficient means for heating the feeding means and for transmitting the heat to the main body or bulk of material within the body of the lamp; to provide simple and efficient means for holding a plurality of feeding wicks in such a way that substantially all the material within the body of the lamp may be fed to the lighting wick which is located so that the feeding means may engage a part thereof, and to provide simple means for conducting the heat from the heating device or the burner to the material about the feeding wicks.

Another object of the invention is to provide a simple and efficient holder for the lighting wick which may be removably held in the lamp to permit the wick to be replaced or for other purposes.

A further object of the invention is to provide a simple and efficient light regulator which may be adjustably held on the burner of the wick holder to regulate the extent of light, and which is so constructed that the same may have heat conductors forming a part thereof which are constructed so that

they will be entirely free from carbon often caused by the flame or smoke from the wick. 55

A still further object of the invention is to provide simple and efficient means whereby a part of the material may be supplied for initially lighting the lamp, and to provide means whereby the lamp may be properly supported in any desired position. 60

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description. 65

In the drawings, Figure 1 is a vertical section, partly in elevation, of one form of lamp embodying my invention. Fig. 2 is a plan view. Fig. 3 is a fragmentary vertical section through the upper portion of a lamp showing the wick holder heater and light regulator in position; and Fig. 4 is a fragmentary plan view of the lamp with the preliminary heater and light regulator removed. 70

The lamp has a body 10 which may be cylindrical in cross-section and tapering toward the upper part thereof, and said upper portion may be provided with a cover 11 which may be held to the body portion in any desired way. This cover 11 has a flange portion 12 in which is removably held a cup-shaped stopper or cap 13 by which the lamp may be filled, and connected to the cup-shaped cap 13 is a ring 14 to which is attached a chain 15, and this chain may extend so as to connect to a ring 16. The ring 16 may be held to a wire bail 17, the ends of which are held to the body portion, and on said bail is a handle 18. This handle 18 may be of wire and bent to form two loops to provide a suitable bearing surface on the bail 17, one end of which is bent downwardly to form a substantially U-shaped part 19, the lower end of which, as at 20, is adapted to rest against the body 10 of the lamp. The upper part 21 of the handle terminates in a hooked portion 22, and this hooked portion extends over far enough and centrally of the lamp to permit the lamp to be removably held to a support in an upright position, and by having the handle slidingly held on the bail 17, the 105

said lamp may be adjusted to various positions.

A spout-like part 23 is located at the front of the lamp and this part may extend from the base of the body 10 to the top 11, and said part 23 may be open at the upper portion thereof and projects far enough from the body 10 at the upper part thereof to provide a relatively large opening or space 24 in which is adapted to fit a lighting wick holder 25 which is adapted to be removable from the part 23. As shown, the part 23 has substantially straight front and side walls and the holder is substantially rectangular in cross-section and adapted to fit in the open space 24 between said walls, the rear portion of said part 23 and the holder being curved to correspond with the curvature of the upper part of the body 10 of the lamp. This holder 25 has a front wall 26 and a downwardly-extending wall 27 at the rear thereof somewhat shorter than the wall 26 and between which the lighting wick 28 may be confined, the said wick being arranged so as to form a plurality of upright portions in order that a comparatively long wick may be located in a compact space. The wall 26 of the holder 25 forms a part of the burner 29, and said burner, Fig. 4, is tubular and elongated to correspond with the shape of the wick and has an outwardly-extending flange, as 30, Fig. 1, by which the said burner may be attached to the upper flange 31 of the holder 25, thus the holder 25 may be made of two pieces. The burner is provided with one or more openings 32 at or near the upper portion thereof by which a pointed or other instrument may be inserted through the opening to elevate the wick the proper distance, though instead of the opening, manually operated means may be provided for raising or lowering the wick.

The lower portion of the holder 25 is open and held in any suitable way. Under the holder is a wick tube or device 33. This device 33 may be of any suitable form and attached and supported within the body in any desired way. As shown, it is substantially rectangular in form and may be open at one or both sides and may be secured to the body of the receptacle by means of solder, as at 34, at the upper and lower portion thereof or in any other suitable manner. The wick holder or device 33 inclines downwardly and rearwardly from the forward portion of the lamp under the holder 25 containing the lighting wick 28, and in said device 33 are the two feed wicks 35 and 36. These wicks are long enough to reach the bottom or base of the lamp body 10 and at the upper portion overlap, as at 37, and engage or rest against the lower part of the lighting wick 28 so that said wicks 35 and 36 serve as means to feed the wax or material when melted to the lighting wick 28. The wicks

35 and 36 may be opposed or lie against the front and rear walls 38 and 39 respectively, of the feed wick holder 33, and may be held between said walls by lugs or projections 40. The forward wall 38 of the device 33 is extended, as at 41, and is separated from the forward wall of the spout-like part 23 so as to receive the lower part of the wall 26 extending from the burner, so that the heat from the burner will be carried or conducted by the wall or plate 26 to the extended part 41 against which it rests. This will properly heat the material within and about the device 33 to liquefy the material so that it may be properly fed to the lighting wick 28, and arranged within the device 33 between the wicks 35 and 36 is a wire gauze 42 or other means serving to further conduct the heat to melt the wax or other material. As thus constructed, effective means is provided for feeding the material and also for heating the same to keep the material liquefied or soft enough for feeding purposes.

As a means to preliminarily heat the material in order that the same may be made in a proper condition for lighting purposes, and to permit the material to be quickly heated, I provide a heater 43. This heater 43 has two arms 44 on opposite sides thereof, and connecting these arms are the transverse plate-like parts 45. These parts 45 form a vertical wall at the rear of the arms and at their lower edges curve outwardly, as at 46, and under each part 46 is a space 47 through which air may enter in order to enter the flame from the wick so as to serve to properly heat the device 43. The arms 44 of the device extend downwardly and are pivoted, as at 48, to the inner walls of the wick holder 25, and said walls of the wick holder extend downwardly and are in contact, as at 49, with the walls of the feeding device 33. The pivoting of the device 43 to the holder is for the purpose of placing it in the position shown in full lines, Fig. 1, for preliminary heating purposes, and to permit the same to be moved to the position shown in dotted lines in said figure, when the preliminary heating has been accomplished.

As will be seen when the wick is lighted, air will enter the flame and the device 43 will be quickly heated, and this heat will be conducted through the arms 44 to the holder to heat enough material to keep the wick supplied, and as the heat continues, it will be conveyed to the feeding wick holder 33 until the entire body is placed in such condition that the lighting wick 41 will be properly supplied with the material, and as soon as the wick is properly supplied, the heating device may be moved to the position shown in dotted lines, as it is not necessary to permit the same to remain in the position shown in full lines in Fig. 1. By providing the

air spaces 47; and the plate-like parts 45, the said heater will remain clean and entirely free of carbon and will also quickly heat the material to properly have the same fed to the wick.

5 The wick may be lighted in any suitable manner as by a match, or a device, as 50, may be employed. This device is tubular in form and may have the lower part thereof provided with perforations 51 into which the material may flow, and said device may be inserted through an opening, as at 52, and has a handle portion, as at 53, which may be connected as by a chain 54 to the ring 16, as shown in Fig. 2. The device 50 may be used to supply sufficient wax to the wick when the same is lighted or it may be lighted itself and used as a torch or taper to light the wick in the first instance.

20 To regulate the extent of light, various means may be employed. As shown a device 55 is provided which has its body 56 band-like and formed to pass about the burner, and said body may be made so as not to close the opening 32. If the wick should be drawn too far out, the burner can be extended by moving the device 56 along the burner, and said device 55 is provided with heat conductors 57. There are two of such parts at the front of the light regulating device and two at the rear, and said parts are curved and provided with cut-away parts or openings 58 at the lower portion thereof for the entrance of air so that the air will enter the flame and keep the said parts 57 free of carbon deposit, and said parts will serve further to convey or conduct the heat to the holder and other parts of the lamp.

40 From the foregoing it will be seen that a simple and efficient lamp is provided in which the preliminary heater will remain entirely free of carbon deposit; that simple and effective means is provided for conducting heat both preliminarily and while the lamp remains lighted; that simple means is provided for holding the feed and the lighting wicks independently of each other; that simple means is provided for supporting the lamp, and that said lamp is simple in construction and may be readily made and assembled.

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

55 1. A lamp having a receptacle adapted to hold a medium to be lighted, a lighting wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick, a feed wick holder having a part extending upward and in contact with the wall of the wick holder, a wire mesh fabric arranged within said feed wick holder, and a heating device pivotally held to the walls of the holder and having means 65 to the walls of the holder and having means

as a part thereof to cause air to be directed into the flame.

2. A lamp having a receptacle adapted to hold a medium to be lighted, a lighting wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick, a feed wick holder having a part extending upward and in contact with the wall of the wick holder, and a heating device pivotally held to the walls of the holder. 70 75

3. A lamp having a receptacle adapted to hold a congealable medium to be lighted, a lighting wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick, a feed wick holder having a part extending upward and in contact with the wall of the wick holder, a wire mesh fabric arranged within said feed wick holder, and a heating device pivotally held to the walls of the holder. 80 85

4. A lamp having a receptacle adapted to hold a medium to be lighted, a wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick, and a feed wick holder having a part extending upward and in contact with the wall of the wick holder. 90

5. A lamp having a receptacle adapted to hold a medium to be lighted, a lighting wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick, a feed wick holder having a part extending upward and in contact with the wall of the wick holder, and a wire mesh fabric arranged within the feed wick holder, and a heating device. 95 100

6. A lamp having a receptacle adapted to hold a medium to be lighted, a lighting wick holder comprising a body having a downwardly-extending wall and a tubular portion for the wick secured to said body, a feed wick holder having a part extending upward and in contact with the wall of the wick holder, a heat-conducting wire mesh device arranged within the feeding means, and a heating device pivotally held to the walls of the holder and having a wall as a part thereof to cause air to be directed into the flame. 105 110 115

7. A lamp having a body forming a receptacle adapted to hold a lighting medium and provided with a spout portion at one side thereof having an open upper end, a wick holder detachably held in said open end and having a body provided with a downwardly-extending wall and an integral tubular burner portion attached to said body, a light regulator movably held on said burner and provided with heat conducting parts having means to direct air into the flame, a heater pivotally held to the holder and having means to direct air into the flame, a wick holding device forming a feed independent of the lighting wick holder and having a 120 125 130

part in contact with the downwardly-extending wall, and a wire mesh interposed between the wicks of the feeding device serving to conduct the heat from the holder.

5 8. A lamp having a body forming a receptacle adapted to hold a lighting medium and provided with a spout portion at one side thereof having an open upper end, a wick holder detachably held in said open
10 end and having a tubular burner portion, a light regulator movably held on said burner and provided with heat conducting parts having means to direct air into the light, and a heater pivotally held to the holder and
15 having means to direct air into the flame.

9. A lamp having a body forming a receptacle adapted to hold a lighting medium, a wick holder detachably supported by the receptacle and having an elongated tubular
20 burner portion, a light regulator having band-like body movably held on said burner and provided with heat conducting parts, and a heater pivotally held to the holder and having means to direct air into the
25 flame, a wick holding device forming a feed independent of the lighting wick holder, and a wire mesh heat conducting device interposed between the wicks of the feeding device.

30 10. A lamp having a body forming a receptacle adapted to hold a lighting medium, a lighting wick holder detachably held in said receptacle and having a downwardly-extending wall and an elongated tubular
35 burner portion, a light regulator movably held on said burner and provided with heat conducting parts, and a heater pivotally held to the holder and having means to direct air into the flame, and a wick holding
40 device forming a feed independent of the lighting wick holder and having a wall in contact with the downwardly-extending wall of the lighting wick holder.

45 11. A lamp having a receptacle, a lighting wick holder supported by said receptacle, and a preliminary heater having arms pivotally held within a part of the receptacle and spaced bar-like parts connected to said
50 arms.

12. A lamp having a receptacle, a lighting

wick holder supported by said receptacle, and a preliminary heater having arms pivotally held to the holder within a part of the receptacle and spaced bar-like parts connected to said arms.

55 13. A lamp having a receptacle, a lighting wick holder supported by said receptacle, and a preliminary heater having arms extending within a part of the holder and pivoted to the same, said holder having
60 parts in contact with the receptacle.

14. A lamp comprising a receptacle, a box-like holder having an elongated tubular part forming a burner for a wick, the said wick being entirely confined within said holder, 65 an adjustable tubular member slidably held upon said tube to vary the length of said burner, said adjustable member being provided with heating portions, and means located within the receptacle for supplying
70 fuel to the lighting wick.

15. A lamp having a receptacle provided with a burner and means for feeding a medium to said burner, a bail attached to said receptacle, and a handle adjustable on
75 said bail and having a hooked portion at one end adapted to extend over the lamp, and another part adapted to rest against the body portion thereof.

16. A lamp having a receptacle provided 80 with a burner and means for feeding a medium to said burner, a bail fixed to said receptacle, and a handle, a part fitting about the bail and adjustable thereon and having a hooked portion at one end adapted to extend
85 over the lamp, and a substantially U-shaped part adapted to rest against the body portion thereof.

17. A lamp having a receptacle provided with a burner and means for feeding a 90 medium to said burner, a bail fixed to said receptacle, and a handle adjustable on said bail and having a hooked portion at one end adapted to extend over the lamp.

This specification signed and witnessed 95 this sixth day of September A. D. 1910.

HARRY BROUSSEAU.

Witnesses:

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