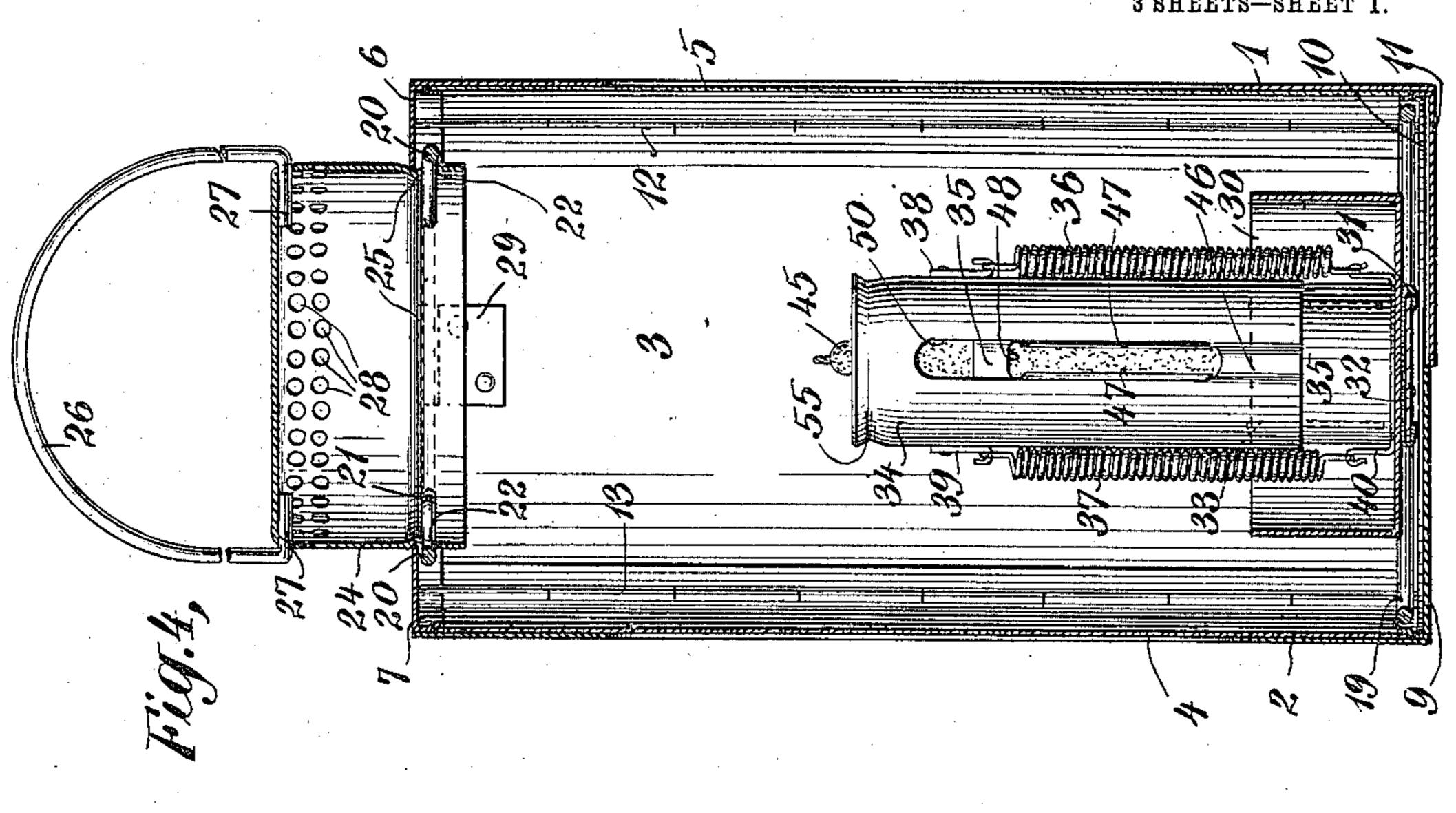
C. H. STONEBRIDGE.

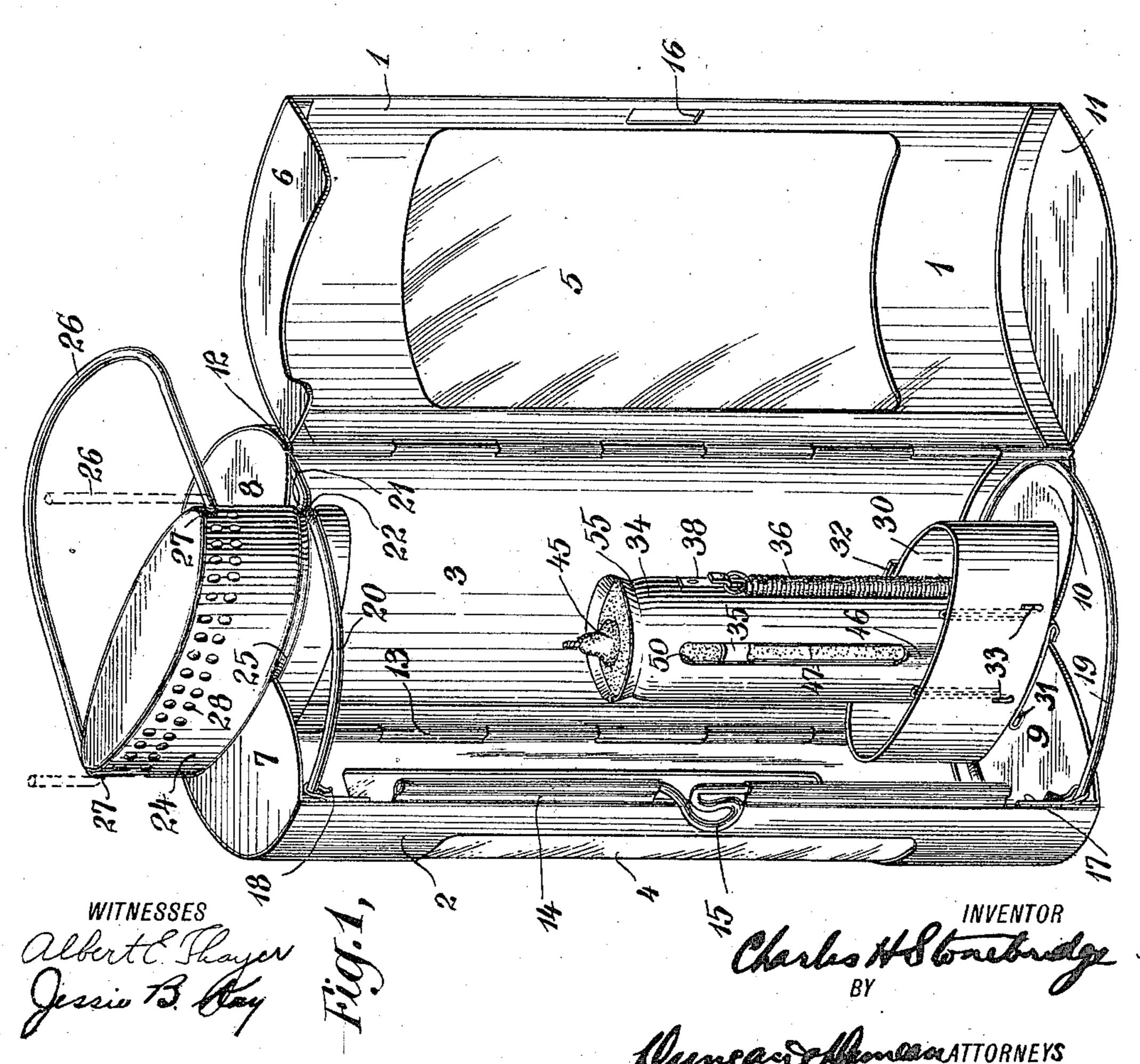
FOLDING LANTERN.

APPLICATION FILED JUNE 24, 1909. 963,826.

Patented July 12, 1910.

3 SHEETS-SHEET 1.





C. H. STONEBRIDGE.

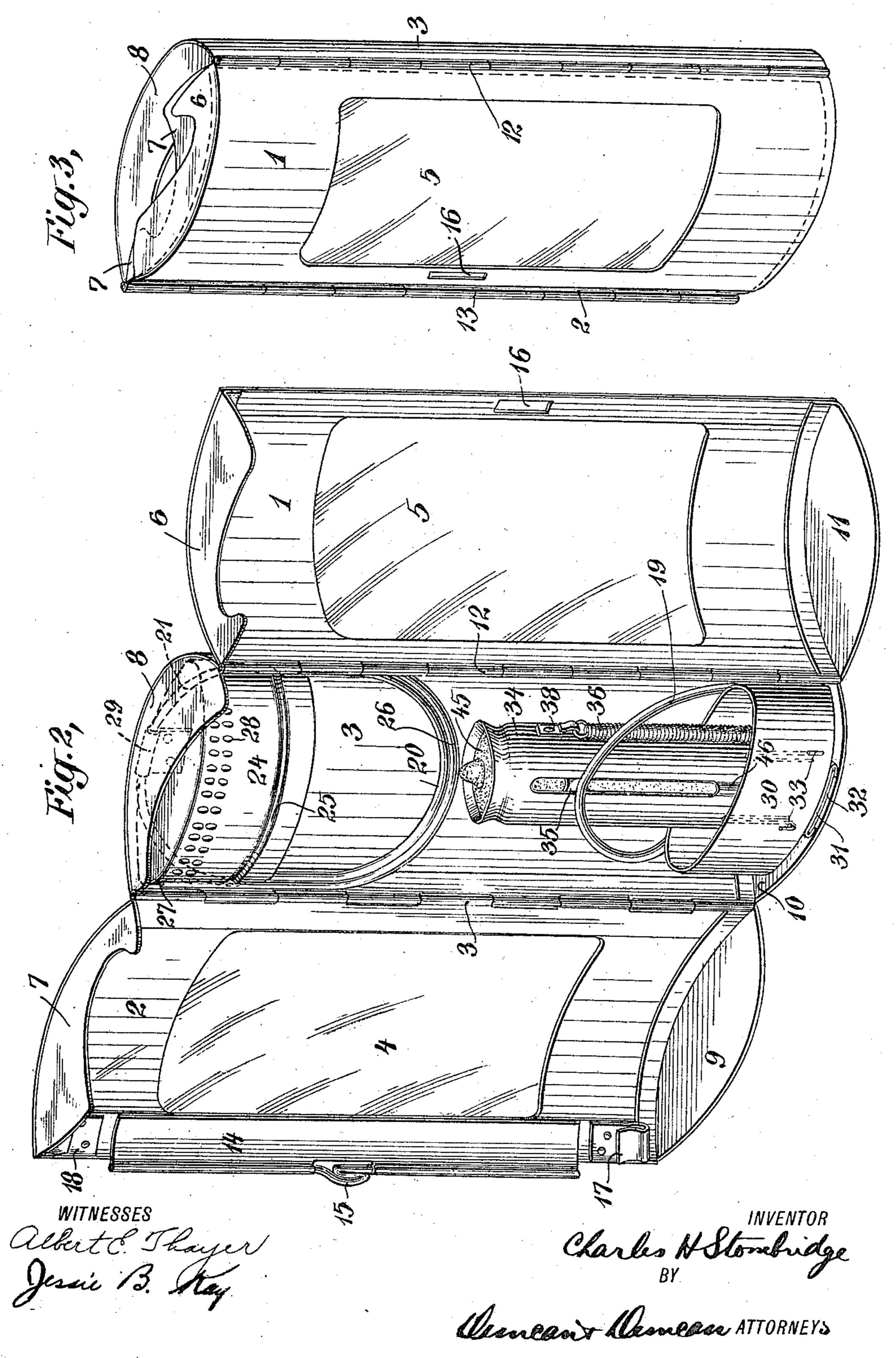
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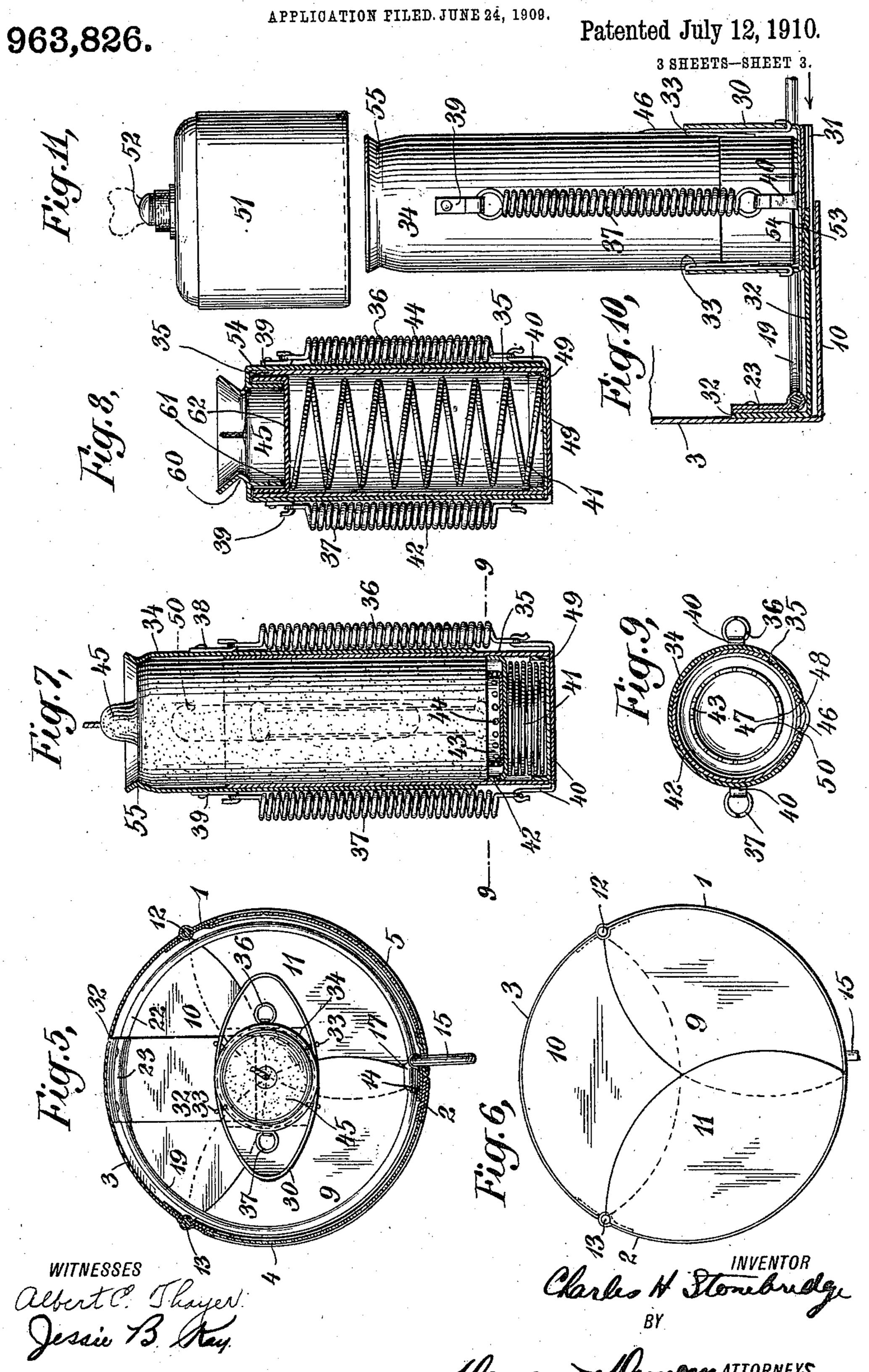
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3 SHEETS-SHEET 2.



C. H. STONEBRIDGE.

FOLDING LANTERN.



UNITED STATES PATENT OFFICE.

CHARLES H. STONEBRIDGE, OF NEW YORK, N. Y.

FOLDING LANTERN.

963,826.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed June 24, 1909. Serial No. 503,989.

To all whom it may concern:

Be it known that I, Charles H. Stone-Bridge, a citizen of the United States, and resident of New York, in the county and State of New York, have made certain new and useful Inventions Relating to Folding Lanterns, of which the following is a specification, taken in connection with the accompanying drawings, forming part of the same.

This invention relates to folding lanterns and relates especially to folding pocket lanterns comprising a plurality of folding sections adapted to inclose the candle or lamp

15 when in closed position.

In the accompanying drawings showing an illustrative embodiment of this invention, and in which the same reference numeral refers to similar parts in the several figures, 20 Figure 1 is a perspective view of the lantern in extended position with the front open. Fig. 2 is a similar perspective view in which the side has been disengaged and the parts ready to be folded up. Fig. 3 shows 25 in similar perspective the folded position of the lantern. Fig. 4 is a vertical front section of the lantern in extended position. Fig. 5 is a similar horizontal sectional view. Fig. 6 is a bottom view. Fig. 7 is a vertical 30 section of the candle holder with a new candle therein. Fig. 8 shows a similar view where the candle has been partly consumed. Fig. 9 is a horizontal sectional view taken substantially along the line 9—9 of Fig. 7. Fig. 10 is a detail showing the mounting of the candle holder in the lantern. Fig. 11 shows a lamp which may be used instead of the candle and holder.

The lantern may consist of any desired number of folding sections preferably adapted when in extended position to form a lantern of cylindrical shape. As indicated in the drawings three lantern sections may be used, the side 2 and front 1 being preferably hinged to the back 3 by suitable hinges 12, 13 extending along the two sides of the back, as shown in Figs. 1 and 2. The back may as indicated be provided with an integral top flange 8 and bottom flange 10.

The front 1 may have the similar top flange 6 and bottom flange 11, while the side may have the top flange 7 and bottom flange 9 secured thereto in any desired manner.

As is seen in Figs. 2 and 6 the various bottom flanges may be of lenticular form so as to form a complete circular bottom

when in the extended position shown in Fig. 6 and so as to fold compactly into close contact with one another when the lantern is closed, as indicated in Fig. 3. The various 60 lantern sections may be held in extended position by any desired means, as for instance by suitable braces in the form of rings or otherwise such as the bottom brace 19 which may be hinged in the brace clip 23 secured 65 adjacent the bottom portion of the back, as indicated in Fig. 10. A coöperating bottom clip 17 may be provided on the side section of the lantern so that this brace 19 may be forced down into it and be resiliently held 70 therein and rigidly hold the side and back sections of the lantern in proper extended position. The front may be conveniently secured in position by any desired form of latch, such as 15, which may be swingingly 75 and slidingly mounted in the latch bracket 14 secured to the side so that the latch may pass through the latch opening 16 in the front when the front section is swung inward from the position shown in Fig. 1 80 after lighting the lantern. The latch may then be forced down so as to lock over the lower edge of this latch opening or slot 16 and securely hold the parts in position. It is of course understood that any of the lan- 85 tern sections may be provided with transparent panes of any desired size, the side 2 being indicated as provided with the pane 4 of transparent mica or other material and a similar pane 5 being shown as inserted in 90 the front 1.

The hood 24 may as indicated be formed of lenticular cross-section and of such size as to fit within the back in the position shown in Fig. 2 so as to allow the lantern 95 to be folded up in the closed position shown in Fig. 3. The hood may as indicated be formed with a plain closed top and with any desired number of rows of smoke holes 28 adjacent thereto, a suitable handle 26 be- 100 ing, if desired, pivotally secured to the hood by which the lantern may be carried. The hood may as indicated be formed with the hood groove 25 extending around it so as to be engaged by the top flanges on the several 105 lantern sections which are of lenticular shape and provided with openings fitting in the hood groove so as to allow the sections to be readily brought together and closely engage the hood groove and firmly hold these parts 110 of the lantern when it is in the extended position shown in Figs. 1 and 4. The hood

may be conveniently connected to the other parts by pivotally mounting it upon the top brace 20 which may have an inturned portion or pivot member 21 on each side 5 loosely engaging the pivot apertures 22 in the hood. The top brace or ring 20 of wire or other desired material may be pivoted in the brace clip 29 secured to the back and cooperate with the top clip 18 on the side 2. 10 In this way when the top brace 20 is forced into position in this top clip as indicated in Fig. 1 the hood is held in its extended position projecting through the top members of the lantern sections and the side is firmly

15 held by the top and bottom braces.

A suitable support or candle cup 30 of any desired construction may be movably mounted in any desired way as by slidingly mounting this support upon the back 3. A suit-20 able support slide 32 may as indicated in Fig. 10 be secured to the back and be engaged by the sheet metal yoke or coöperating slide member 31 secured to the support so that the support may be extended to bring 25 it into substantially the central position within the lantern when the latter is extended, as shown in Figs. 5 and 10. For the purpose of holding it in this extended position any desired means may be provided such as 30 the alining notch 54 in the yoke and a cooperating detent 53 on the slide. The support and yoke may thus be readily forced inward against the back into the retracted position shown in Fig. 2, the support pref-35 erably having a substantially elliptical or lenticular cross-section so as to fit within the bottom flange of the back when folding up the lantern. A series of suitable grip springs 33 may as indicated in Figs. 2, 5 40 and 10, be arranged within the support so as to grip and hold in position a suitable lamp, candle holder or other lighting device.

The candle holder may as indicated com-45 prise the tubular guide 35 to which the bottom 49 may be secured and the coöperating tubular holder 34 which may have a loose sliding engagement with the guide, these two members being preferably formed with 50 suitable alining and observation means. A suitable candle slot 50 may as indicated in Fig. 4 be formed in the holder and the guide may be formed with a coöperating candle slot 48 through which slots the candle may 55 be observed, the lips 47 on the guide being flanged out sufficiently to loosely engage or coöperate with the edges of the slot 50 so as to maintain alinement between the holder and guide. The holder may of course be 60 provided with a suitable recess to accommodate these lips when the parts are assembled. A suitable constricted throat, such as 55, may be formed adjacent the upper edge of the holder so as to properly engage the c5 candle 45 within and form a sufficiently high

flange above this throat to hold the melted candle grease. The strong spiral control springs 36, 37 may be used to connect the holder and guide and normally force these parts together as the candle is consumed 70 until they are brought into engagement as indicated in Fig. 8, these springs engaging if desired the spring hooks 38, 39 on the holder and the hook member 40 on the guide.

A suitable candle socket 42 may be pro- 75 vided, preferably closely fitting within the guide to properly engage the candle and be fed upward as the candle is consumed by the light feeding spring 41 so that after the relatively strong control springs have forced 80 the holder down into engagement with the guide, as indicated in Fig. 8, the holder remains in this position and the feeding spring continues to feed the candle up into the holder throat until it is consumed, during 85 which time the candle flame is maintained in substantially uniform position. If desired, the holder throat 60 may as indicated in Fig. 8, be sufficiently constricted so that a suitable depending throat flange 61 may 90 be formed thereon to fit loosely within the upper portion of the socket 62 and still more effectively prevent leakage of candle grease, for which purpose this flange may be long enough to be closely engaged by the bottom 95 of the socket 61 when in its extreme upward position indicated. In some cases, a suitable central socket member 43 may, if desired, be mounted within the socket 42 and suitable drain apertures, such as 44, may be 100 provided in this inner socket so as to allow the melted candle grease to be absorbed by the wick. If desired, of course, a suitable lamp, such as 51, may be used instead of the candle holder and candle, the burner 52 105 being located at such height as to give the proper illumination within the lantern. The lantern may be very readily folded

up by releasing the latch and opening the front 1 and thereupon releasing the bottom 110 and top braces from their clips 17, 18, so as to swing the side 2 out into the position indicated in Fig. 2. The candle 26 and top brace 20 may then be swung downward into the position indicated, the candle support 115 and holder pushed back against the back member and the bottom brace 19 simultaneously swung upward as indicated. The side 2 may then be swung around, the latch 15 being turned inward and then by closing the 120 front 1 into the position indicated in Fig. 1 the whole lantern is very compact so as to be readily carried in the pocket and the candle or lamp is securely inclosed within the folded lantern, as is desirable.

Having described this invention in connection with illustrative embodiments, forms, proportions and devices, to the details of which disclosure the invention is not of course to be limited, what is claimed 130

125

as new and what is desired to be secured by Letters Patent is set forth in the appended claims.

1. The folding pocket lantern comprising 5 a plurality of sections capable of being closely folded together into lenticular cross section and comprising a back, and a side and front provided with transparent panes and hinged to the sides of said back, said 10 sections being provided with lenticular top and bottom flanges so as to form when extended a cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said 15 back and coöperating with said bottom clip, a top brace hinged to said back and coöperating with said top clip to hold said side firmly in position with respect to said back, a hood of a lenticular cross-section, provided with smoke holes, pivotally secured to said top brace and formed with a hood groove cooperating with and closely engaged by said top flanges, a support slide secured to said back, a support of lenticular cross-section 25 and having a yoke coöperating with said slide, grip springs in said support and a candle holder to fit within said support and be engaged by said grip springs, said candle holder comprising a guide formed with a 30 candle slot and with lips, a coöperating holder formed with a candle slot with which | said lips coöperate and formed with a holder throat adjacent its top, strong control springs between said holder and guide, a 35 candle socket mounted within said holder to engage a candle and a light feeding spring normally tending to force said socket up-

ward. 2. The folding pocket lantern comprising 40 a plurality of sections capable of being closely folded together into lenticular crosssection and comprising a back and a side and front provided with transparent panes and hinged to the sides of said back, said sec-45 tions being provided with lenticular top and bottom flanges so as to form when extended a cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back and co-50 operating with said bottom clip, a top brace hinged to said back and coöperating with said top clip to hold said side firmly in position with respect to said back, a hood of substantially lenticular cross-section pro-55 vided with smoke holes pivotally secured to said top brace and formed with a hood groove cooperating with and closely engaged by said top flanges, a support slide secured to said back, a support having a 60 yoke coöperating with said slide and a candle holder to fit within said support, said candle holder comprising a guide formed with a candle slide and with lips, a coöperating holder formed with a candle

formed with a holder throat adjacent its top, strong control springs between said holder and guide, and a candle socket mounted within said holder to engage a candle and a light feeding spring normally 70

tending to force said socket upward. 3. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into substantially lenticular cross-section and comprising a 75 back, a side and front provided with panes and hinged to the sides of said back, said sections being provided with substantially lenticular top and bottom flanges so as to form when extended a substantially cylin- 80 drical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back and coöperating with said bottom clip, a top brace hinged to said back and coöperating with 35 said top clip to hold said side firmly in position with respect to said back, a hood pivotally secured to said top brace and formed with a hood groove coöperating with and closely engaged by said top flanges, a sup- 90 port slide secured to said back, a support mounted on said slide and a candle holder to fit within said support, said candle holder comprising a guide and coöperating holder formed with candle slots, strong control 95

springs between said holder and guide, a

candle socket mounted within said holder

to engage a candle, and light feeding spring

normally tending to force said socket up-

ward. 4. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into substantially lenticular cross-section and comprising a back and a side and front secured to said 105 back, said sections being provided with substantially lenticular flanges so as to form when extended, a substantially cylindrical lantern with a closed bottom, a top clip mounted on said side, a top brace hinged to 110 said back and coöperating with said clip to hold said side firmly in position with respect to said back, a hood loosely secured to said top brace and coöperating with and closely engaged by said sections, a support 115 movably mounted on said back and a candle holder to fit within said support, said candle holder comprising a guide and coöperating holder formed with candle observation means, strong control spring means between 120 said holder and guide, and a light feeding spring within said guide normally tending to force a candle upward.

5. The folding pocket lantern comprising a plurality of sections capable of being 125 closely folded together and comprising a back and a connected side and front, said sections being provided with bottom flanges so as to form when extended a substan-65 slot with which said lips cooperate and tially cylindrical lantern with a closed bot- 130

tom, a top brace hinged to one of said sections and coöperating with another section to hold the two firmly in position, a hood secured to said top brace and coöperating 5 with and closely engaged by said sections, a support mounted on one of said sections and a candle holder coöperating with said support, said candle holder comprising a guide and coöperating holder formed with 10 candle observation means, candle engaging means on said holder, strong control spring means between said holder and guide, and a light feeding spring within said guide normally tending to force a candle upward.

6. The folding pocket lantern comprising a plurality of sections capable of being closely folded together and comprising a back and a connected side and front, said sections being provided with bottom flanges 20 so as to form when extended a lantern with a closed bottom, a top brace hinged to one of said sections and coöperating with another section to firmly hold the two in relative position, a hood and connected han-25 dle secured to said top brace and coöperating with said sections, a support secured to one of said sections and a coöperating candle holder, said candle holder comprising a guide and coöperating holder formed with 30 candle observation means, strong control means between said holder and guide, a candle engaging member on said holder, and a light feeding spring within said guide normally tending to force a candle upward.

7. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into lenticular crosssection and comprising a back, and a side and front provided with transparent panes 40 and hinged to the sides of said back, said sections being provided with lenticular top and bottom flanges so as to form when extended a cylindrical lantern with a closed bottom, top and bottom clips mounted on 45 said side, a bottom brace hinged to said back and coöperating with said bottom clip, a top brace hinged to said back and coöperating with said top clip to hold said side firmly in position with respect to said back, 50 a hood of a lenticular cross-section, provided with smoke holes, pivotally secured to said top brace and formed with a hood groove coöperating with and closely engaged by said top flanges, a support slide secured 55 to said back, a support of lenticular crosssection and having a yoke coöperating with said slide, grip springs in said support and a candle holder to fit within said support

and be engaged by said grip springs. 8. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into lenticular crosssection and comprising a back and a side and front provided with transparent panes 65 and hinged to the sides of said back, said

sections being provided with lenticular top and bottom flanges so as to form when extended a cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back 70 and coöperating with said bottom clip, a top brace hinged to said back and coöperating with said top clip to hold said side firmly in position with respect to said back, a hood of substantially lenticular cross-section pro- 75 vided with smoke holes pivotally secured to said top brace and formed with a hood groove coöperating with and closely engaged by said top flanges, a support slide secured to said back, a support having a yoke 80 coöperating with said slide and a candle holder to fit within said support.

9. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into substantially 85 lenticular cross-section and comprising a back, a side and front provided with panes and hinged to the sides of said back, said sections being provided with substantially lenticular top and bottom flanges so as to form 90 when extended a substantially cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back and coöperating with said bottom clip, a top brace hinged to 95 said back and coöperating with said top clip to hold said side firmly in position with respect to said back, a hood pivotally secured to said top brace and formed with a hood groove coöperating with and closely 100 engaged by said top flanges, a support slide secured to said back, a support mounted on said slide and a candle holder to fit within said support.

10. The folding pocket lantern compris- 105 ing a plurality of sections capable of being closely folded together into substantially lenticular cross-section and comprising a back and a side and front secured to said back, said sections being provided with sub- 110 stantially lenticular flanges so as to form when extended a substantially cylindrical lantern with a closed bottom, a top clip mounted on said side, a top brace hinged to said back and coöperating with said clip to 115 hold said side firmly in position with respect to said back, a hood loosely secured to said top brace and coöperating with and closely engaged by said sections, a support movably mounted on said back and a candle 120 holder to fit within said support.

11. The folding pocket lantern comprising a plurality of sections capable of being closely folded together and comprising a back and a connected side and front, said 125 sections being provided with bottom flanges so as to form when extended a substantially cylindrical lantern with a closed bottom, a top brace hinged to one of said sections and cooperating with another section to hold the 130

two firmly in position, a hood secured to said top brace and coöperating with and closely engaged by said sections, a support mounted on one of said sections and a candle 5 holder coöperating with said support.

12. The folding pocket lantern comprising a plurality of sections capable of being closely folded together and comprising a back and a connected side and front, said 10 sections being provided with bottom flanges so as to form when extended a lantern with a closed bottom, a top brace hinged to one of said sections and coöperating with another section to firmly hold the two in relative po-15 sition, a hood and connected handle secured to said top brace and coöperating with said sections, a support secured to one of said sections and a coöperating candle holder.

13. The folding pocket lantern compris-20 ing a plurality of sections capable of being closely folded together and comprising a back and connected side and front, said sections being provided with rigid flanges so as to form when extended a lantern with a 25 closed bottom, a brace secured to one of said sections and coöperating with another section to firmly hold them in extended position, and a hood connected to said brace and coöperating with and closely engaged by

30 said sections.

14. The folding pocket lantern comprising a plurality of sections capable of being closely folded together and comprising a back and a connected side and front, said sec-35 tions being provided with bottom flanges so as to form when extended a substantially cylindrical lantern with a closed bottom, a top brace hinged to one of said sections and cooperating with another section to hold the 40 two firmly in position and a hood secured to said top brace and coöperating with and closely engaged by said sections.

15. The folding pocket lantern comprising a plurality of sections capable of being 45 closely folded together into substantially lenticular cross-section and comprising a back and a side and front secured to said back, said sections being provided with substantially lenticular flanges so as to form 50 when extended, a substantially cylindrical lantern with a closed bottom, a top clip

mounted on said side, a top brace hinged to said back and coöperating with said clip to hold said side firmly in position with respect to said back and a hood loosely secured to 55 said top brace and coöperating with and

closely engaged by said sections.

16. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into substantially 60 lenticular cross-section and comprising a back, a side and front provided with panes and hinged to the sides of said back, said sections being provided with substantially lenticular top and bottom flanges so as to 65 form when extended a substantially cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back and coöperating with said bottom clip, a top brace hinged to 70 said back and coöperating with said top clip to hold said side firmly in position with respect to said back and a hood pivotally secured to said top brace and formed with a hood groove coöperating with and closely 75 engaged by said top flanges, a support slide secured to said back.

17. The folding pocket lantern comprising a plurality of sections capable of being closely folded together into lenticular cross- 80 section and comprising a back and a side and front provided with transparent panes and hinged to the sides of said back, said sections being provided with lenticular top and bottom flanges so as to form when ex- 85 tended a cylindrical lantern with a closed bottom, top and bottom clips mounted on said side, a bottom brace hinged to said back and coöperating with said bottom clip, a top brace hinged to said back and coöperat- 90 ing with said top clip to hold said side firmly in position with respect to said back and a hood of substantially lenticular crosssection provided with smoke holes pivotally secured to said top brace and formed with a 95 hood groove coöperating with and closely

engaged by said top flanges.

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Witnesses:

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