H. P. BALL.
COMBINED LAMP AND STAND.
APPLICATION FILED SEPT. 22, 1914. RENEWED JUNE 30, 1915.

1,237,453. Patented Aug. 21, 1917.

Fig. 1

Fig. 2

Fig. 3

Witnesses:

Inventor
Henry Price Ball

By C. M. Taylor
Attorneys.
To all whom it may concern:

Be it known that I, HENRY PRICE BALL, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State of New York, have invented a certain new and useful Combined Lamp and Stand, of which the following is a specification.

My invention relates to a collapsible stand and a lamp supported thereby and has for its objects to produce a device whereby—

First, the lamp will be prevented from turning in the stand;
Second, the stand will be prevented from being collapsed when the lamp is in position; and
Third, the lamp will always be properly seated in the stand.

These and further objects will more fully appear in the following specification and accompanying drawings considered together or separately.

In the drawings:
Figure 1 is a top plan view of a stand with a lamp in position;
Figure 2 is a side elevation of the same;
Figure 3 is a bottom plan view of a lamp with a portion of the stand in section; and
Figure 4 is a section on the line 4—4 of Fig. 3.

In all of the views, like parts are designated by the same reference characters.

The stand is very similar to the stand illustrated in patent of Charles Nelson, No. 1,006,185, granted May 12, 1914 so far as is herein pointed out. It comprises a base and legs 2, 3 and 4. The base is preferably of flat metal and the legs are preferably of wire bent to shape. I prefer to employ three legs as shown, but the number may be increased if desired. The leg 2 is preferably rigidly secured to the base by rivets, as shown. The legs 3 and 4 are each pivotally secured to the base by a pin or rivet, as shown. The legs 3 and 4 are so situated relatively to the leg 2 that they may be turned so as to lie substantially parallel thereto so that the stand will occupy a minimum of space when not in use. The legs extend outwardly and downwardly from the base to form feet. The legs are then bent upwardly and inwardly, as at 5, so as to encompass the lamp when in operative position. The portions 5 of the legs reach their greatest inward projection at a point approximately midway the top and bottom of the lamp. The legs are then bent outwardly and upwardly and then horizontally in an inward direction, as at 6, to form a support for the culinary vessel or other device which is to be held above the flame of the lamp. So much of the device is identical with that described in Patent 1,006,185. The novel feature of the stand is as follows: At about the point of greatest inward projection, at 5, each leg is provided with an inwardly projecting ledge 5. Each ledge may be conveniently made, as shown, e.g., by pinching in the wire to form the ledge. Each ledge has a horizontal upper surface, and extends inward toward the center of the stand a sufficient distance to prevent the descent of the lamp, unless the flames, to be hereinafter described, are in alignment therewith.

The lamp comprises a vessel 7 which is adapted to contain a solid fuel. The said vessel is of transverse dimensions small enough to allow it to be passed axially between the projecting ends 6 of the stand, when extended, but of too great transverse dimensions to pass between the inwardly curved intermediate portions 5 of the legs or the ledges 5. The lamp is preferably of general cylindrical shape. It has portions of its surface of less distance from its center than other portions of its surface. One way of making these portions of less distance may be accomplished by providing the side walls with a plurality of flutes or grooves 8. These preferably extend from the bottom upward to a point above the greatest inward projection of the portions 5 of the legs. The flutes are equal in number to the legs and are arranged the same circumferential distance apart as are the legs. The depth of the flutes is such as to permit the lamp to be passed axially between the
portions 5 of the legs when the flutes are in position coincident to the legs.

The flutes preferably do not extend to the top of the lamp as it is desirable, from a manufacturing point of view, to preserve the cylindrical shape of the upper part of the lamp, as shown. This shape also permits the use of a friction closure, as shown in the drawings.

10 The frictional engagement of the bases of the flutes with the portions 5 of the legs will be sufficient to retain the lamp in place even when the position of the stand is reversed.

15 When the lamp is in position resting on the base 1 with the portions 5 of the arms 2, 3 and 4 resting against the bottoms of the flutes or grooves, the lamp will be securely held in position, and it cannot turn in the stand. Each of the legs 3 and 4 is pivoted to turn on a center which is to one side of the center of the lamp, hence the arms will turn through a circle with a radius, which is a distance less than half of the transverse dimension of the lamp, therefore, the arms 2 and 3 will be securely held against turning on their pivots.

20 The ledges 5 form abrupt abutments against which the lower edge of the lamp will engage if the latter is improperly inserted in the stand. These abrupt abutments will resist downward pressure, hence force applied downward will not spread the legs apart and thus allow the lamp to be seated. The operator must first turn the lamp to bring the flutes in alignment with the legs before the lamp will be seated. The height of the lamp is such that when engaged by the ledges 5, its upper surface will be above the level of the projecting ends 6 of the stand. Therefore, if a careless or untidy user should only partly seat the lamp, and allow it to rest on the ledges, a utensil resting on the stand would extinguish the flame and thus prevent accident. While I have illustrated a plurality of flutes on the side of the lamp, it is to be understood that a single flute of sufficient depth may be employed.

25 In accordance with the provisions of the patent statutes, I have described the principle of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire to have it understood that the apparatus shown is merely illustrative and that the invention can be carried out in other ways.

It will be observed that the grooves in the body of the lamp not only serve to prevent the collapsing of the stand, but also by their engagement with the inwardly projecting portions of the legs of the stand produces a more stable structure when the parts are assembled.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A lamp comprising a body with contracted parts perpendicular to its base in several places, in combination with a stand having a plurality of pivoted legs engaging with such contracted parts, whereby said stand is prevented from collapsing by the engagement of the legs with such contracted parts.

2. A lamp having a vertical groove in its exterior surface, in combination with a stand having members engaging the exterior of the lamp and extending above the lamp and having inwardly projecting portions adapted to engage the bottom of the lamp when placed in said stand, and permitting the lamp to be operatively positioned in the stand only when a projecting portion of a member of the stand is in alignment with the groove.

3. A lamp of cylindrical shape having a plurality of vertical grooves in its exterior surface, in combination with a stand having members extending above the lamp and provided with inwardly projecting portions so separated that there is a separating space less than the greatest diameter of the lamp and of greater diameter than the diameter of the lamp at the bases of the grooves, whereby when the lamp and stand are assembled said portions will engage with the bottom of the lamp and prevent proper positioning of the lamp until the grooves and inwardly projecting portions are brought into alignment.

4. A lamp of cylindrical shape having a plurality of vertical grooves equally spaced in its exterior surface, in combination with a stand having members extending above the lamp and provided with inwardly projecting portions so separated that there is a separating space less than the greatest diameter of the lamp and of greater diameter than the diameter of the lamp at the bases of the grooves, the number of members corresponding to the number of grooves, whereby when the lamp and stand are assembled said portions will engage the bottom of the lamp and prevent proper positioning of the lamp until the grooves and inwardly projecting portions are brought into alignment.

5. A lamp, having a groove or flute on its side, in combination with a stand, having members engaging the side of the lamp, and a ledge on a member, adapted to engage with the bottom of the lamp, unless in alignment with the groove.

6. A lamp of cylindrical shape, with a
plurality of flutes on its side, in combination with a stand having members so separated that there is a separating space of less diameter than the greatest diameter of the lamp, and of greater diameter than the diameter of the lamp at the bases of the flutes, said members having ledges which will engage with the bottom of the lamp, unless the flutes are in alinement with the members.

This specification signed and witnessed this 19 day of Sept., 1914.

HENRY PRICE BALL.

Witnesses:

S. J. Becker,
G. L. Miller.