

Specification of a patent for an improvement in the production of Artificial Light, in the burning of tallow, or oil, and other fatty substances. Granted to ISAIAH JENNINGS, City of New York, May 20th, 1830.

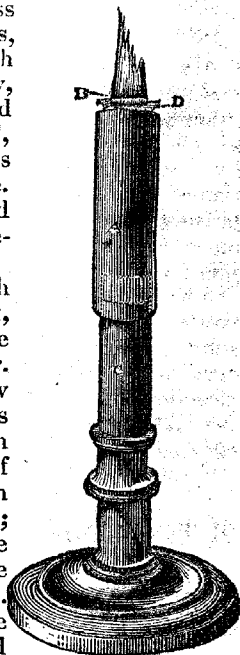
To all whom it may concern, be it known, that I, Isaiah Jennings, of the city of New York, have invented certain improvements in the production of artificial light, both in the burning of tallow and oil, and others kinds of fatty substances, which improvements consist in part in the mode in which tallow, or other suitable substances may be formed into candles, and in part in the structure of the apparatus in which they, or other fatty substances, are burned, and that the following is a full and exact description of the same.

1st. When hard fat is to be burned, I form it into a candle, which I usually make of about two inches in diameter, and from four to twelve inches in length; these are made by casting the fat into a mould; the wicks are made flat, and about one inch and a quarter wide. These I usually make of cotton cloth, folded so as to give to the wick the desired thickness; it is cast in the tallow in the usual way.

A suitable stand, to be used as a candlestick, is prepared to receive this candle; the upper part of this stand (C,) is made cylindrical, and about the same diameter and length as the candle; the length, however, may be varied considerably. A glass tube (A,) is prepared, which is open at both ends, usually about nine inches long, and of such diameter as will allow the candle to slide freely, though tightly, in it. When the candle is placed upon the stand, or candlestick, above described, the tube is slid over it, until its upper edge is nearly on a level with the top of the candle. This glass tube is made capable of being passed down over the cylindrical part of the candlestick, as the candle burns away.

A strip of brass, or other substance, which I call a wick hold, (D,) is passed over the wick, (B,) in order to prevent its burning below the edge of the glass tube, and also the cylinder. The wick holder is of such a length as to allow its ends to reach across, and rest upon the glass tube; it has a slot, or mortise, of sufficient length and width to pass over the wick. The ends of the wick holder may be notched so as to form checks to retain it in its place upon the tube; or two or more flat or round wicks may be placed near the outer edge of the cylinder, the wick holders being so formed as to correspond.

A candle of this description will burn a whole evening without requiring to be snuffed, and



may be decreased in length about one and a half inches. The glass tube may be then slipped down, the wick cut to a suitable length above the wick holder, and the candle relighted.

Soft grease or oil may be burned in a tube of this description, by having hard tallow at the lower part, or by making it tight with some other substance; or cork, or other elastic substance, may be used for the same purpose, pouring the grease or oil in above it, and allowing the wick to hang loosely from the wick holder within it; as it burns down it may be replenished, or the tube slid down as before.

A candle of the above kind may be made of any desired length or diameter; it may, for example, be two feet in length, and the glass tube need not be more than four inches. The tube may also be made of earthenware, or of any bad conductor of heat; a good conductor would melt the tallow throughout the whole length.

A glass burner may be placed over the flame if desired.

What I claim as new in the foregoing, is the glass, or other tube, that is a bad conductor, sliding over the candle, in the manner, and for the purposes described.

ISAIAH JENNINGS.

ENGLISH PATENTS.

To DONALD CURRIE, Esq. for a method of preserving Grain and other Vegetable and Animal Substances and Liquids. Communicated by a Foreigner. Dated January 31, 1828.

My said method of preserving grain and other vegetable and animal substances, is, by inclosing them in air tight vessels, vaults, or other proper receptacles, from which I extract the atmospheric air as much as possible, and replace it with carbonic acid gas, procured by any of the well known methods; as, for instance, by the combustion of charcoal, or by fermentation; and thus I prevent the tendency of the grain to vegetate, and greatly hinder the decomposition of the other vegetable and animal matters which is ordinarily so greatly promoted by the action of the oxygen contained in atmospheric air.

The liquids must be put into tightly corked, or otherwise closed bottles, or other fit and proper vessels, and be then inclosed in a similar manner in air tight vessels, vaults, or other proper receptacles, filled with carbonic acid gas, which will hinder the usual destruction of the corks or other closures, and consequently, preserve the said liquids in a more complete manner than has hitherto been effected.

[*Rep. Pat. Inven.*]

To THOMAS STIRLING, Slater, for improvements on Filtering Apparatus. Dated August 16, 1828.

MR. STIRLING'S filtering apparatus consists of a vessel of considerable depth in proportion to its other dimensions (as represented