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Improved Pocket Lantern.

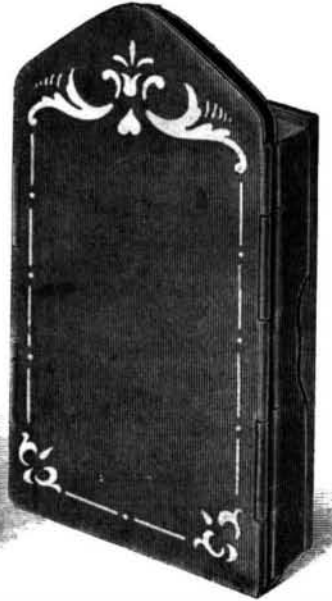
There are many places and occasions where a lantern would be highly desirable if at hand. To a hunter lost in the wilderness; to the soldier in his tent; to the voyager on the high seas; to the pleasure seeker, or the man of business; to those who are out at all hours and liable to be caught at any time without a light; to the guide, philosopher, or friend, prophet, priest or sage, this pocket lan-

tern is the thing long desired. If Diogenes, seeking for his honest man had had one of these lanterns to light him he would have found what he sought. This lantern is one of the most ingenious combinations of its class we have ever seen. When extended, or opened for use, it assumes the shape shown in Fig. 1, which is, as any one can see, a perfect lantern in every respect. When not required it is collapsed by folding first the roof, A, which has a hinge in the middle, and secondly, applying pressure across the corners of the case, B, which causes it to shut up flat; a second folding then brings it to the shape shown in Fig. 2, which is just half the size of the actual lantern. The candle will burn fully an hour, and

Fig. 1



Fig. 2



MINOR'S POCKET LANTERN.

thinks, make discoveries profitable to hygiene and agriculture.

has exposed ozone papers at Rouen for several years, and has found that the chemical activity of the air reaches its maximum in the spring (May and June), diminishes in the summer, and in the autumn almost disappears. It re-appears, however, in winter, and becomes specially appreciable in March. The author remarks on the coincidence of this chemical exaltation with the awakening of nature, and suggests the study of it to physicians and farmers, who may, he

thinks, make discoveries profitable to hygiene and agriculture.

Improved Damper and Ventilator.

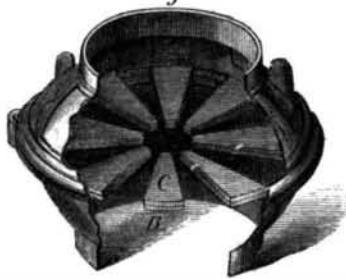
These engravings represent a new damper and ventilator for stoves. By the use of it the shaft can be perfectly controlled or the apartment ventilated, as occasion requires. The invention consists in forming a casting, A, with a diaphragm, B, in which are a series of openings. These openings are covered by plates, C, when the same are placed in the proper position. The exterior of the casting is ornamental in design, and is also furnished with holes, D, and there is a sleeve inside which covers them up when the projection, E, is moved. Both the plates, C, and

the sleeve are connected together, but the apertures are so arranged with relation to each other that when one set is open the other set is shut, so that when the fire requires all the air which can pass through it, the openings, D, are closed, as in Fig. 2; otherwise, when the atmosphere is vitiated, by turning the damper so as to open the hole, D, it will be ventilated.

Fig. 1



Fig. 2



BOYNTON'S DAMPER AND VENTILATOR.

a supply of them is provided in the magazine, C, which is on the door. Just inside the door there is a reflector, which cannot be shown. The candle holder, D, can be turned outside on a pivot so as to use this reflector when in a room; the light is much increased thereby. This is a capital lantern and it will be appreciated by every one.

It was patented through the Scientific American Patent Agency, by John A. Minor, on Jan. 24, 1865. Patents have also been secured abroad. For further information address the general Agent, New York Lamp Co., No. 259, Pearl street, New York.

M. HOUZEAU has presented to the Academy of Sciences a memoir, "On the Influence of the Seasons on the Properties of Atmospheric Air." The author

the sleeve are connected together, but the apertures are so arranged with relation to each other that when one set is open the other set is shut, so that when the fire requires all the air which can pass through it, the openings, D, are closed, as in Fig. 2; otherwise, when the atmosphere is vitiated, by turning the damper so as to open the hole, D, it will be ventilated.

This damper and ventilator was patented through the Scientific American Patent Agency on May 5, 1863; for further information address Richardson, Boynton & Co., No. 234 Water street, New York.

It is said that a foreign photographic house now makes pocket handkerchiefs with the photograph of the owner in the corner. In some cases this addition would not be an ornament.

Petroleum as a Steam Fuel.

In some experiments made by Mr. C. J. Richardson, an Woolwich Dockyard, with his improved petroleum boiler, he has succeeded in evaporating 150 gallons of water with 14 gallons of petroleum. It appears that with the improvements he vaporizes, on the average, at the rate of 12½ lbs. of water per one gallon of petroleum, and Mr. Richardson anticipates reaching 14 lbs. or 15 lbs. with the gallon of petroleum. For such early trials, he considers the results hitherto obtained are extremely satisfactory. The oil is under perfect control, there is no danger whatever, and the boiler is very easily worked.

TO KEEP BUTTER IN THE SUMMER.—A simple mode of keeping butter in warm weather, where ice is not handy, is to invert a common flower-pot over the butter, with some water in the dish in which the butter is laid. The orifice at the bottom may be corked or not. The porousness of the earthenware will keep the butter cool.

[It will be still cooler if the crock be wrapped with a wet cloth. Not the porosity of the earthenware, but the rapid abstraction of heat by external evaporation causes the butter to become hard.—Eds.]

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