

E. RITTER.
Case for Preserving and Transporting Powder.

No. 217,959.

Patented July 29, 1879.

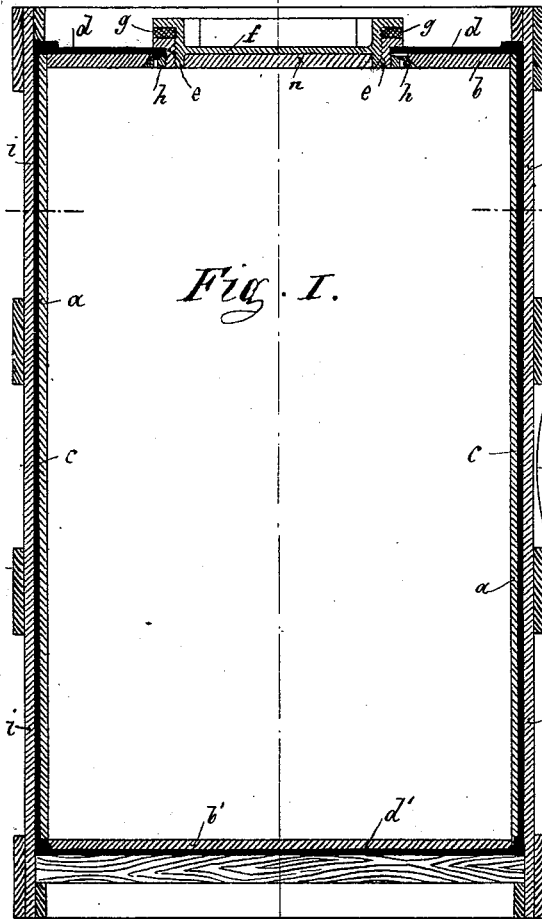


Fig. I.

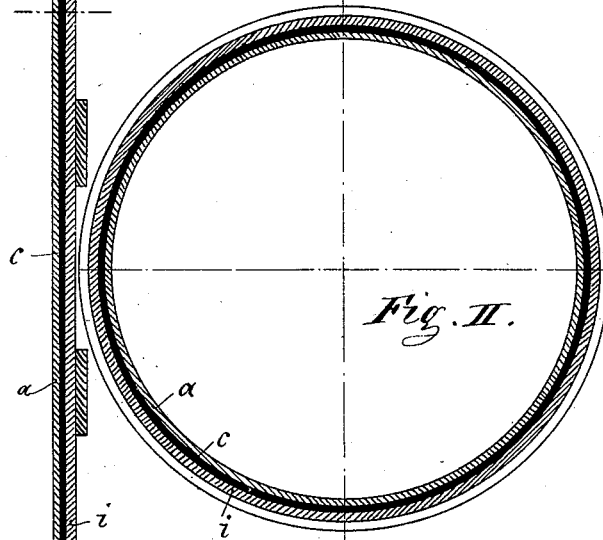


Fig. II.

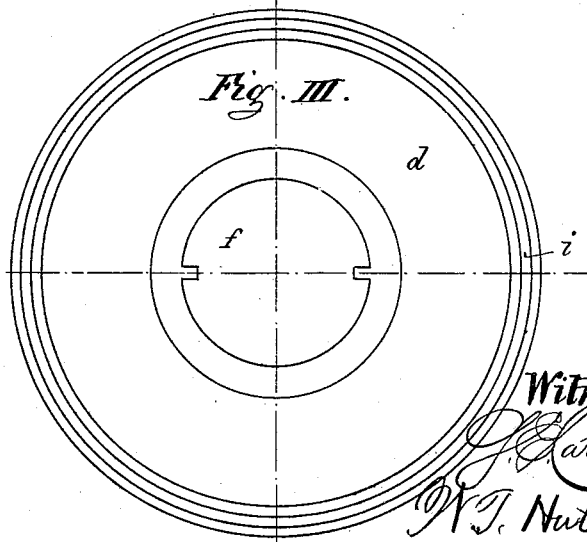


Fig. III.

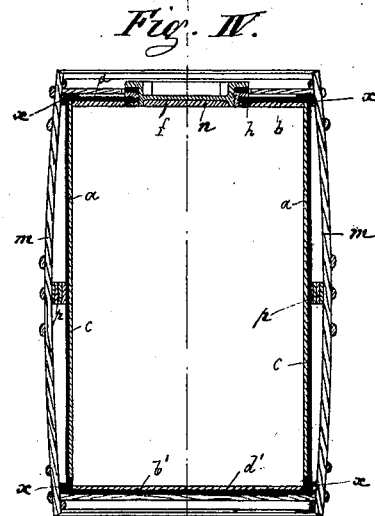


Fig. IV.

Witnesses

J. Carpenter
W. J. Hutchinson

Inventor:

Eugen Ritter
per Henry E. Roeder
attorney

UNITED STATES PATENT OFFICE.

EUGEN RITTER, OF EHRENFELD, NEAR COLOGNE, GERMANY.

IMPROVEMENT IN CASES FOR PRESERVING AND TRANSPORTING POWDER.

Specification forming part of Letters Patent No. **217,959**, dated July 29, 1879; application filed June 3, 1879.

To all whom it may concern:

Be it known that I, EUGEN RITTER, of Ehrenfeld, near Cologne, in the Empire of Germany, have invented a new and Improved Case for Preserving and Transporting Powder and similar materials, of which the following is a specification.

It is of the greatest importance to protect powder against moisture, dampness, and decomposition while being preserved in the magazine or store-room.

By the usual methods of packing powder at present employed this has been tried to be obtained either by the employment of wooden casks and hermetically-closed cases of copper or other suitable materials, or in using linen sacks or india-rubber bags. While the former as well as the latter are not capable of affording any protection against humidity, the copper cases will in time decompose the powder by the influence of the material, without taking in account the great inconvenience of handling these cases.

My improved barrel not only insures a complete protection against any humidity, but preserves the powder in the best conceivable manner by surrounding the same with paper, and prevents any decomposition and its becoming moldy.

In the accompanying drawings, Figure I is a vertical section of a powder-case embodying my invention. Fig. II is a horizontal section of the same, and Fig. III is a top view of the same. Fig. IV represents a vertical section of a powder-case inclosed in a barrel.

Similar letters represent similar parts in all the figures.

a is a cylinder, made of thick paper or pasteboard, to which a corresponding cover, *b*, and

bottom *b'* are solidly connected. This paper cylinder is surrounded by a metal cylinder, *c*, having its cover *d* and bottom *d'* soldered to it. In the cover *d* a suitable hole is made, to which a ring, *e*, is soldered, for the purpose of filling and emptying the barrel or case, and into which the cover *f* is screwed to close the same. At the inner edge of the ring *e* a nut, *h*, is screwed, to secure the inner edge of the paper cover *b* to the metal cover *d*. The inner face of the cover *f* is lined with paper *n*, and between the flange of this cover and the top of the ring *e* an india-rubber washer, *g*, is placed to make a tight joint.

The above-described case may be protected by an exterior wooden case, *i*, fitting close against the metal cylinder *c*, as shown in Fig. I, or the same may be surrounded by a barrel, *m*, made in the usual manner, as shown in Fig. IV, in which latter case one or more central rings, *p*, as well as end rings, *x*, are placed between the exterior of the metal cylinder and the interior of the barrel to hold the case in its proper position during transportation.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described packing-case, consisting of an interior paper or pasteboard cylinder, *a*, with top *b* and bottom *b'* of the same material, tightly inclosed and surrounded by a metal casing, *c*, with suitable top *d* and bottom *d'*, and having a screw-cover, *f*, arranged in the manner and for the purpose substantially as set forth.

EUGEN RITTER.

Witnesses:

EDUARD FORKEL,
M. F. CASSEL.