No. 642,979. Patented Feb. 6, 1900.

L. G. HAASE.

BRIQUET.

(Application filed Nov. 29, 1899.)

(No Model.)

Fig. 1.

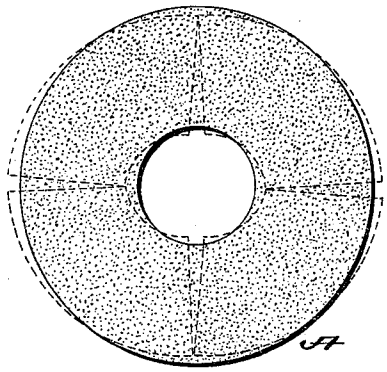


Fig. 2.

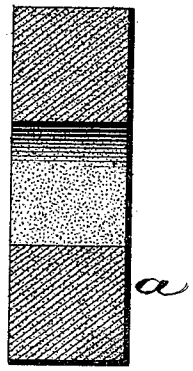
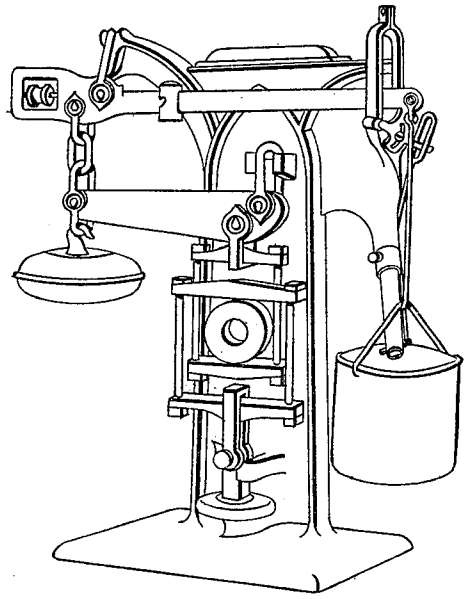


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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BRIQUET.

SPECIFICATION forming part of Letters Patent No. 642,979, dated February 6, 1900.

Original application filed October 17, 1898, Serial No. 693,782. Divided and this application filed November 29, 1899. Serial No. 738,675. (No model.)

To all whom it may concern:

Be it known that I, LEO G. HAASE, a citizen of the United States, residing at Oak Park, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Briquets, of which the following is a description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The present invention relates to the art of testing cement; and the object is to provide an improved form of briquet for the carrying out of the process claimed in my application filed in the United States Patent Office October 17, 1898, Serial No. 693,782, the present application being a division of said other application.

Heretofore cement-testing briquets have been in the form of solid blocks which were placed in a testing-machine such as shown in the patent to C. C. Miller, No. 313,607, dated March 10, 1885, and subjected to a pulling action or tensile strain. Much difficulty has been experienced in testing cement by this old process and form of briquet, owing to the fact that this briquet will not break evenly, but will frequently break beyond the center by reason of an abnormal lateral or twisting strain. By my improved briquet and the process described in the aforesaid application the results attained are uniform to a marked degree.

My invention consists in the matters hereinafter described, and referred to in the appended claims.

In the accompanying drawings, Figure 1 represents a face view of one of my improved briquet, the dotted lines showing the same after the application of the crushing action. Fig. 2 is a central transverse vertical section, and Fig. 3 is an outline of a testing-machine with an improved briquet in position therein.

The improved process claimed in the aforesaid application consists in first forming the different specimens (varieties) of cement into ring briquets of a uniform standard section, size, and opening and afterward subjecting them successively to accurately-measured crushing force in the direction of their diameters.

In the drawings, A represents the improved briquets as a whole, and the preferred form is that of the cross-section of a cylinder or tube about three inches in diameter, the wall *a* of which is one inch wide and one inch thick. By this construction and by using a suitable form of compression-clamp, such as shown in the drawings, when the clamp-jaws are forced together the annular briquet will be broken at four points, thus breaking into four square inches, as shown in dotted lines, or, if desired, it may be broken at only two diametrically opposite points. In any event the breaking will be uniform, as experiment has proven.

In testing cement by tensile strain upon the solid briquet or that commonly called the "standard" the recorded variations in briquets made from the same lot of cement ran as high as one hundred pounds. A series of eight tests of cement by my process and annular briquet gave the following results—viz., four hundred and eighty-four, four hundred and seventy, four hundred and seventy-two, four hundred and ninety-one, four hundred and seventy, four hundred and sixty-six, four hundred and seventy-three, and four hundred and seventy pounds, respectively, which clearly shows what uniform results are attained thereby, and the briquets used in these tests were not especially selected for the purpose.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a cement-testing briquet, of annular shape, whose walls in width and thickness are of a definite unit of size; substantially as described.

2. As a new article of manufacture, a molded cement-testing briquet in shape, the cross-section of a tube or cylinder, the thickness and width of its walls, and the diameter of its central opening being of the same unit of size; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LEO G. HAASE.

Witnesses:
JOHN KOPPELMEYER,
WM. F. HAASE.