

UNITED STATES PATENT OFFICE

ADOLPH HAMANN, OF GROSSENHAIN, SAXONY, GERMANY.

PROCESS OF RENDERING BILLIARD AND WRITING CHALK UNBREAKABLE.

SPECIFICATION forming part of Letters Patent No. 330,019, dated November 10, 1885.

Application filed July 27, 1885. Serial No. 172,817. (No specimens.)

To all whom it may concern:

Be it known that I, ADOLPH HAMANN, of the town of Grossenhain, in the Kingdom of Saxony and German Empire, have invented
5 certain new and useful Improvements in Processes for Rendering Billiard and Writing Chalk Unbreakable, of which the following is a specification.

10 My invention relates to a process for rendering billiard and writing chalk unbreakable—that is, to so treat the chalk-cubes generally used for chalking billiard-cues, chalk for writing on black-boards, and other purposes, so that the same are rendered unbreakable.

15 The frangibility and brittleness of the prepared chalk now employed for the above-named purposes has been long felt to be the greatest disadvantage the same possesses, and various schemes have been tried to overcome
20 the difficulty—for instance, by inserting the chalk in elastic covers of india-rubber—which are, however, very inconvenient with billiard-chalk, and entirely prevent their being employed for writing-chalk.

25 This present invention renders it possible to treat the chalk in such manner that the same is rendered fully unbreakable and will not peel or spring in cutting, so that the advantages obtained by employing my process
30 will be evident to all.

The method of carrying my process into operation is as follows: The washed chalk is formed in suitable formers to suit the special purpose for which it is intended, and after the
35 so-formed pieces have become thoroughly dry, the same are coated on all sides with a very

fluid oil-varnish or boiled linseed or other drying oil, which is allowed to slowly dry in. This treatment is repeated four or five times in intervals of about twenty-four hours, which
40 is necessary in order to assure that the oil or varnish penetrates through the entire piece of chalk and becomes intimately connected with the same. The correct saturation can be at once detected in cutting the chalk by the
45 evident softness of the same, which must be equable throughout the entire thickness of the said chalk. In order to retain this softness of the chalk, I prefer to provide the same, after their having been treated as above mentioned,
50 with a coating of shellac or other suitable varnish.

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

1. As a new article of manufacture, cubes
55 or other pieces of chalk for chalking billiard-cues, writing, and other purposes, which are rendered unbreakable by saturating such said chalk with fluid oil-varnish or boiled linseed or other drying oil, substantially as described. 60

2. The combination of the chalk prepared as claimed under claim 1, with a coating of shellac or other suitable varnish, substantially as described.

In witness whereof I have hereunto signed
65 my name in the presence of two subscribing witnesses.

ADOLPH HAMANN.

Witnesses:

RÜD. SCHMIDT,
CARL SCHRADER.