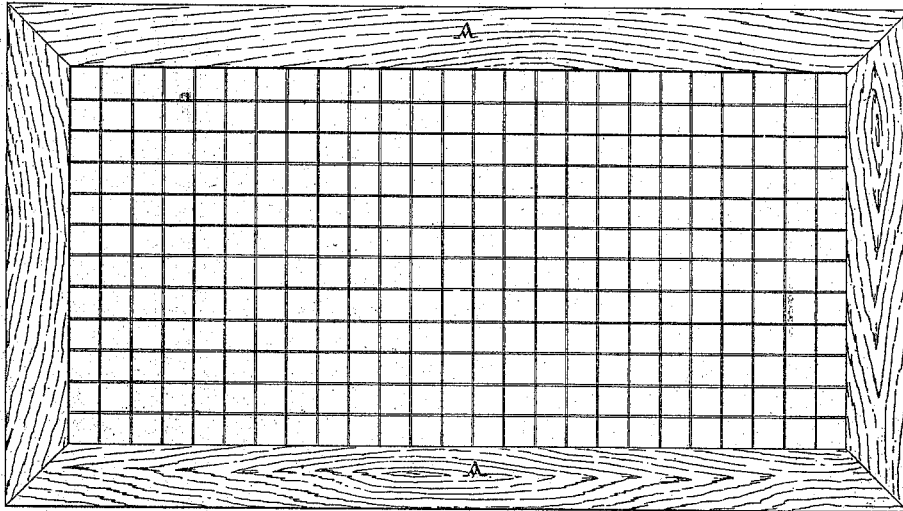
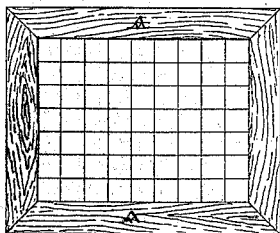


*F. Kraus,*  
*Putting Up Medicine.*  
*No. 108034.* *Patented Oct. 4. 1870.*

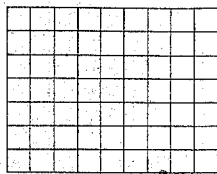
*Fig. 1.*



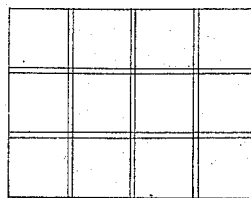
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



*Witnesses:*  
*E. R. Brown.*  
*Parker H. Sweet, Jr.*

*Inventor:*  
*Frederic Kraus*  
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# UNITED STATES PATENT OFFICE

FREDERIC KRAUS, OF CINCINNATI, OHIO.

## IMPROVEMENT IN PUTTING UP MEDICINES.

Specification forming part of Letters Patent No. 108,034, dated October 4, 1870.

### *To all whom it may concern:*

Be it known that I, FREDERIC KRAUS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Method of Putting up Medicines; and I do hereby declare the following to be a full and correct description of the same, sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawing, which makes part of this specification, and in which—

Figures 1 and 2 represent the slates on which my improved medicines are prepared, and Figs. 3 and 4 represent specimens of my improved medicine.

Like letters of reference indicate like parts in the several figures.

The nature of my invention consists in putting up medicines in gelatinous tablets, divided by indented lines into parts of equal size, each part being made to contain the desired dose of medicine, so that each tablet contains any desired number of equal doses; also, in the slates on which these medicines are prepared.

My invention has for its object the putting up of medicines in such a way that they can be taken with the greatest ease by the most delicate patients, while the doses are made equal with the most absolute certainty. Their bulk is so reduced that any quantity of various medicines may be carried by physicians without inconvenience, who thus may at once dispense the medicines they prescribe.

Druggists who prepare medicines in this manner in various doses are saved a great deal of trouble in compounding prescriptions, and the medicines can be safely kept without danger of spoiling.

I compound my improved medicines in tablets containing a large number of doses, and cut these up into smaller tablets containing the number of doses prescribed.

Any kind of medicine which can be dissolved can be put up in this way; and I will now proceed to describe the preparation of sulphuric morphine as an example.

I dissolve eighty grains of the finest, purest, and whitest gelatine in eight ounces distilled

water at a proper degree of heat, preferably 63° Celsius. To this I add seventy-five grains of morphine, thoroughly mixed in thirty-six drops of chemically-pure glycerine. Stir the whole carefully, and then pour it evenly over the slate.

This slate may be of any desired size; but I prefer making it six inches by twelve and one-half, so that when the same is perfectly polished and divided into squares of one-half inch, by means of double parallel lines engraved into the slate to the depth of about half a line, the slate will contain three hundred squares of perfectly equal size. In Fig. 1 I have shown this slate in its frame A, which may be constructed of wood, metal, or any other suitable material, and extends above the surface of the slate.

The slate is made detachable from the frame, so that different slates, being divided into larger or smaller squares, may be used, according to the size of the dose required.

After placing the slate perfectly level, I pour the above-described solution over the slate in an even stream, so that it is covered perfectly even. I then place the entire apparatus in a place where it is protected from dust, and allow the solution to dry at a temperature of about 40° to 45° Celsius. The gelatinous tablet thus prepared easily loosens from the slate, and is then cut between the parallel lines which have been formed on the same by the indented lines on the slate into smaller tablets of twelve or any other desired number of squares, each square containing exactly one-fourth of a grain of sulphuric morphine, as shown in Fig. 3.

In Fig. 4 I have shown a tablet which is intended for medicines which are applied to the eyes, or other very tender parts of the body, in very small doses—as, for instance, sulphuric atropine, which is applied to the eyes. In preparing this tablet I use a slate divided by single lines only, as shown in Fig. 2, so as to enable me to make the squares very small. The advantage of this way of putting up the atropine over its use in a liquid bath is, that the whole dose can be applied directly to the diseased portion of the eye, on which it remains by reason of its gelatinous character,

and it cannot, on account of its fineness, irritate the most delicate part.

In traveling these medicine-tablets can be easily carried, and any person knowing the dose required can purchase these medicines and take them with perfect safety.

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

1. The method of preparing medicines in the manner substantially herein described.

2. Medicines or drugs put up in gelatinous tablets, which are divided into equal doses, in the manner substantially as herein described.

3. The slates shown in Figs. 1 and 2, for preparing gelatinous medicine-tablets, substantially as herein described.

FREDERIC KRAUS.

Witnesses:

J. JAUMANN,

J. A. KEY.