No. 662,796

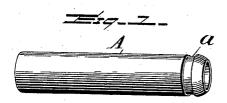
Patented Nov. 27, 1900.

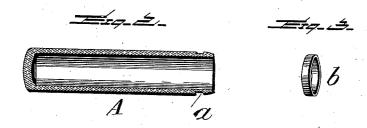
S. KRAUS.

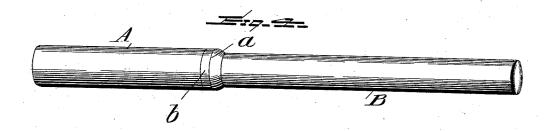
FOUNTAIN PEN.

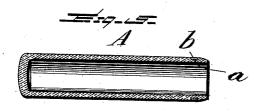
(Application filed Sept. 28, 1900.)

(No Model.)









WITNESSES: LO Hoills Edwinding Dundy

INVENTOR:

Samuel Kraus

BY Maruellux Bailes his Attorney

## UNITED STATES PATENT OFFICE.

SAMUEL KRAUS, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

## FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 662,796, dated November 27, 1900.

Application filed September 28, 1900. Serial No. 31,348. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL KRAUS, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a certain new and useful Improvement in Fountain-Pens, of which the following is a specification.

My invention relates particularly to the cap which usually accompanies the fountain-pen, to and is adapted to fit upon either end of the pen case or handle to cover the pen proper or to form a rearward prolongation of the handle, as the case may be.

In the operation of fitting the cap to the handle at the outset, as well as in the subsequent manipulation and use of the same by the purchaser or user of the pen, the cap, which is made of hard rubber and is necessarily thin-walled, is very liable to split, with coresulting loss to the manufacturer and to the user.

It is my object to provide a non-splitting fountain-pen cap and to secure this result simply and economically.

To this end I proceed as follows: I form the cap in the first instance in the way it is usually made up to the time that it is fitted to the pen-handle, at which period the internal diameter of its mouth is somewhat less than the external diameter of the part of the pen-handle on which it is intended to fit. I form in the exterior of this cap, very near its mouth or open end, a shallow annular groove. I then soften the cap by heat to an extent sufficiently to permit its annularly-grooved end to be contracted by pressure, and after thus contracting the end I slip over it and into the annular groove a ring of metal, preferably aluminium, which just fills the groove. After

this is done I expand the cap again to its 40 original size by inserting into it, for example, an expanding-mandrel. The cap thus armed and protected at and around its mouth can be fitted to the pen-handle, is non-splitting at that point, and can be readily fitted to the 45 handle without any liability to injury. The operation is a simple one, adding nothing to the cost of the article, and results in the production of a very durable and at the same time ornamental fountain-pen cap.

In the accompanying drawings, Figure 1 is a perspective view, and Fig. 2 is an axial section, of the cap after it has been grooved, but before it has received the metal guard-ring. Fig. 3 is a view of the guard-ring. Fig. 4 is 55 a perspective view of the completed cap fitted on a fountain-pen, and Fig. 5 is an axial section of the completed cap.

In the drawings, A is the cap. a is the annular external groove therein. b is the me-60 tallic guard-ring seated in and fitting the groove a and flush with the exterior of the cap, and B is the fountain-pen handle.

Having now described my improvement, what I claim herein as new, and desire to se- 65 cure by Letters Patent, is—

A hard-rubber cap for fountain-pens, having its mouth or open end which fits upon the pen-handle, encircled and tightly bound by a metallic ring, seated in and filling an an- 70 nular external groove in the body of said cap, as hereinbefore shown and set forth.

In testimony whereof I have hereunto set my hand this 24th day of September, 1900.

SAMUEL KRAUS.

Witnesses:

GUST. V. WOLFF, C. W. BOMAN.