## United States Patent Office.

KARL GEISER AND HANS KEHRLI, OF BERNE, SWITZERLAND.

## INKING-CYLINDER.

SPECIFICATION forming part of Letters Patent No. 770,636, dated September 20, 1904.

Application filed January 30, 1904. Serial No. 192,108. (No model.)

To all whom it may concern:

Be it known that we, KARL GEISER and HANS Kehrli, citizens of Switzerland, residing at Berne, in the Republic of Switzerland, have 5 invented a certain new and useful Improvement in Inking-Cylinders; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-

10 pertains to make and use the same.

This invention relates to an inking-cylinder for printing-presses, in which the substance of the cylinder consists of starch, on the one hand, and either a metal salt containing chlorin 15 or a mixture of metal salts containing chlorin, on the other. The manufacture of such a cylinder, for example, is as follows: Concentrated (thirty-five per cent.) solution of chlorid of magnesia and starch—for instance, rice-20 starch—of equal weight in a cold condition are stirred together for about five minutes. This then results in a thick liquid homogeneous mass, which is filtered through a light cloth and then cast in suitable molds, in which it is left 25 until hardened. By warming the molds the hardening process can be hastened. Thorough trials have proven that such cylinders are considerably more durable than the cylinders of gelatin substance used up to the present.

They are also more capable of resistance than 3° these against outside influences of temperature and evince a greater pliability and tract-

ive power.

Through a small addition of glue and glycerin the tractive power and durability of the 35 cylinders can be increased. This addition, for instance, amounts to about two per cent. of the total weight of the cylinder. Of the various metal salts containing chlorin the chlorid of magnesia has proven itself to be 4° particularly suitable.

We claim—

1. An inking-cylinder made by compounding equal weights of starch and concentrated solution of chlorid of magnesium.

2. An inking-cylinder made by compounding equal weights of starch and concentrated solution of chlorid of magnesium with about

two per centum of glue and glycerin.

In testimony whereof we have affixed our 5° signatures to this specification in the presence of two witnesses.

> KARL GEISER. HANS KEHRLI.

Witnesses:

EDUARD VON WALDKIRCH, FRIEDRICH NAEGELI.