

# UNITED STATES PATENT OFFICE.

ISIDOR KITSEE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE XELTON COMPANY, OF NEW JERSEY.

## MATERIAL FOR BEARINGS, VALVES, &c.

SPECIFICATION forming part of Letters Patent No. 646,917, dated April 3, 1900.

Application filed November 23, 1898. Serial No. 697,275. (No specimens.)

*To all whom it may concern:*

Be it known that I, ISIDOR KITSEE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Material for Bearings, Valves, &c., which improvement is fully set forth in the following specification.

My invention consists of a material the base of which is cotton and a binder of celluloid, the same being solid and resilient in its nature.

In carrying out my invention I take, say, seventy per cent. of raw cotton and thirty per cent. of celluloid. The cotton is picked and impregnated or mixed with celluloid, which is primarily dissolved by any suitable solvent, such as ether and alcohol, using about two parts of alcohol to one part of ether, wood-alcohol being preferred, and celluloid scraps being admirably adapted for my purpose. The mass is then poured into a mold and compressed, the resultant article being tough, resilient, impervious to water, and offers great resistance to the severe use to which it may be subjected.

In order to render the resultant article non-inflammable, there may be added to the mass prior to molding a solution of, say, alum and phosphate of ammonia.

Plumbago or other suitable material may be mixed with the compound of cotton and celluloid, together with paper-pulp, sawdust, &c., thus forming a valuable lubricator, which in the case of bearings makes the latter self-lubricating.

I have described the compound as adapted for bearings, valves, &c.; but I reserve the right to use the same for any other purpose to which it is adaptable.

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

As a new article of manufacture, a material consisting of a base of cotton and a binder of celluloid combined therewith.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

ISIDOR KITSEE.

Witnesses:

WALLACE B. ELDRIDGE,  
A. P. RUTHERFORD.