## UNITED STATES PATENT OFFICE.

CARL C. F. OTTO, OF SYRACUSE, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO B. DAVIS NOXON, OF SAME PLACE.

## IMPROVEMENT IN ANTI-FRICTION COMPOUNDS.

Specification forming part of Letters Patent No. 169.031, dated October 19, 1875; application filed September 29, 1875.

To all whom it may concern:

Be it known that I, CARL C. F. OTTO, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Compound called "Anti-Friction Composition," which compound is fully described in the following specification:

This invention relates to that class of compounds used for bearings for railroad-car and locomotive journals, and journals used in the working of machinery, and in the manufacture thereof; and it consists in a composition formed by mixing bolus and glycerine, plumbago, asbestus, manila-pulp, soap-stone, glue, and condensed linseed-oil.

To prepare the anti-friction composition, take equal parts bolus and glycerine and plumbago, and one fourth of soap-stone, mixed with water; this to be dried and pulverized. Then dissolve a sufficient quantity of the glue. Mix it with one hundred parts of the condensed linseed-oil. The pulp is one-tenth of the whole

mass. It is to be squeezed, and washed with alcohol to replace the water. Asbestus is a fiber, which is to be added to the manila-pulp, the asbestus governing the hardness or softness of the anti-friction composition, according to quantity used. The pulp and glue are to be mixed (hot) together with the linseed-oil. Then all of the ingredients are put together and worked into the consistency of potter's clay; then it is molded in plaster molds, and compressed into the required forms in an ordinary press worked with a screw.

I claim-

A compound consisting of bolus and glycerine, plumbago, asbestus, manila-pulp, soapstone, glue, and condensed linseed-oil, treated in the manner described.

CARL C. F. OTTO.

Witnesses:

HENRY NOXON, STANLEY BAGG.