UNITED STATES PATENT OFFICE.

HOWARD BERKEY BISHOP, OF NEW YORK, N. Y.

CLEANSING COMPOUND.

No. 921,350. Specification of Letters Patent. Patented May 11, 1909.

Application filed August 15, 1908. Serial No. 448,701.

To all whom it may concern:

Be it known that I, HOWARD BERKEY BISHOP, a citizen of the United States, resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Cleansing Compounds, of which the following is a specification.

My invention relates to a cleansing compound particularly adapted to remove rust stains without injuring fabrics.

As a specific instance of my invention, I will give the following mixture, which is particularly adapted for use on a large scale, say in laundries.

15 parts (by weight) glacial acetic acid (100 %).
30 parts (by weight) sulfuric acid (100 %).
9 parts (by weight) hydrofluosilicic acid (100 %).
46 parts (by weight) water.

100 parts (by weight).

The water is to be understood to include the water which comes with the acids, and that added to the mixture. This particular mixture, while concentrated so as to reduce charges for shipment, and to make its storage and handling more convenient, will not attack glass and may therefore be kept in ordinary vessels.

In using this mixture I would add about 1 lb. of it to about every 1000 lbs. of the laundry water (without soap), this treatment preceding immediately the usual addition of bluing to the laundry water.

The mixture above specified removes rust stains and some others without injury to the fabrics, which is an entirely unexpected result, since hydrofluoric acid and many other soluble compounds of fluorin are commonly believed to have a strong destructive action.

I claim as my invention:

1. As a cleansing compound, a mixture containing acetic acid, sulfuric acid and hydrofluosilicic acid.

2. As a cleansing compound, a mixture consisting of about 15 parts of acetic acid, 30 parts of sulfuric acid, 9 part of hydrofluosilicic acid, and 46 parts of water.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HOWARD BERKEY BISHOP.

Witnesses:
JOHN A. KEHLENBECK,
FRED A. KLEIN.