

# United States Patent Office.

JOHN SCHIEDER, OF NEW YORK, N. Y.

Letters Patent No. 110,163, dated December 13, 1870.

## IMPROVEMENT IN MATERIALS FOR BEARING-SURFACES IN MACHINERY.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, JOHN SCHIEDER, of the city, county, and State of New York, have invented a new and improved Compound for Bearing-Surfaces in Machinery; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same.

This invention relates to a compound which is prepared by boiling vulcanized India rubber in a mixture of powdered coal and alcohol.

In carrying out my invention I take coal, reduced to fine powder, one pint; alcohol, one half pint; water, one-half pint.

These ingredients I place in a kettle or boiler, of any desired form or shape, and, after they have been thoroughly mixed with each other, I introduce the India rubber, and boil the same in the mixture for two hours, (more or less, according to the thickness of the rubber.) By the action of the heat and of the alcohol, the powdered coal is caused to penetrate to a certain depth into the rubber, and, if the rubber

thus prepared is used for bearing-surfaces of machinery, for instance, journal-boxes, it is not liable to become sticky under the most unfavorable circumstances, and it forms a bearing-surface which requires no lubrication, and which is cheap and durable. At the same time, by the action of the coal and alcohol, the disagreeable odor of the India rubber is neutralized.

The coal which I use, by preference, in carrying out my invention, is bituminous coal, which can be readily reduced to a fine powder by stamping or grinding.

What I claim as new, and desire to secure by Letters Patent, is—

A compound for bearing-surfaces of machinery, prepared substantially as described.

This specification signed by me this 25th day of November, 1870.

JOHN SCHIEDER.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.