L. W. LATHROP & T. A. WEBER.

LINING FOR MACHINE BEARINGS.

No. 170,747. Patented Dec. 7, 1875.

Fig. 1

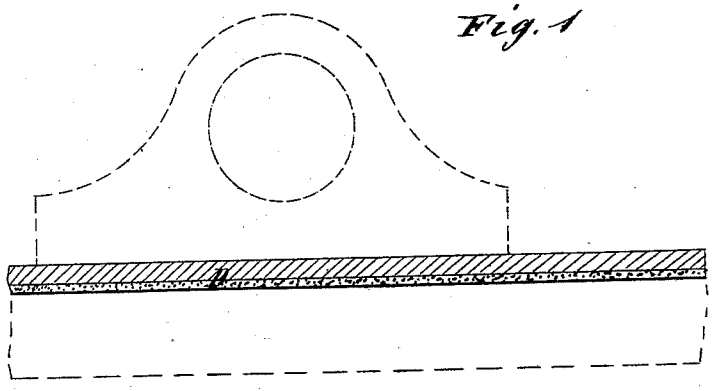


Fig. 2

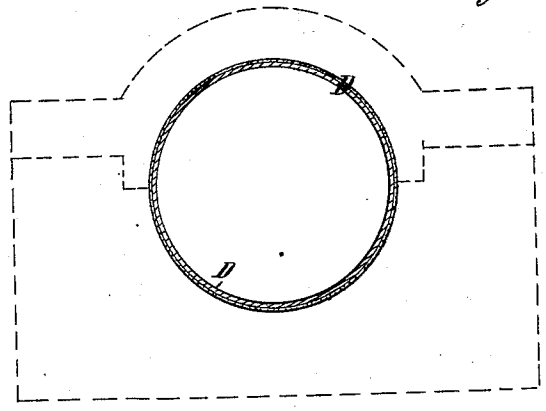
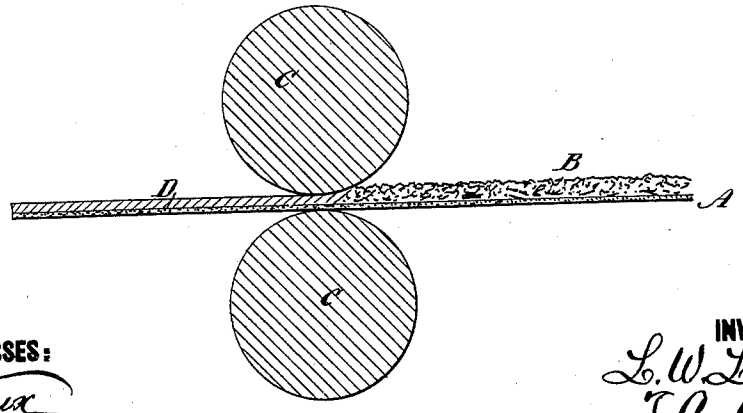


Fig. 3



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LEBBEUS W. LATHROP AND THEODORE A. WEBER, OF NEW YORK, N. Y.

IMPROVEMENT IN LININGS FOR MACHINE-BEARINGS.

Specification forming part of Letters Patent No. **170,747**, dated December 7, 1875; application filed November 2, 1875.

CASE A.

To all whom it may concern:

Be it known that we, LEBBEUS W. LATHROP and THEODORE A. WEBER, of the city, county, and State of New York, have invented a new and Improved Lining for Machinery-Bearings, of which the following is a specification:

Our invention consists of a new article of manufacture, which we denominate "anti-frictionate" cloth, the same being a sheet of cloth, or any other flexible substance of similar form, with a coating on one or both sides of cohered graphite, the said cloth being for the lining or covering of machinery-bearings of all kinds to prevent friction. The anti-friction material is graphite combined with sugar, to weld and adhere the particles in strong and durable form, and cause them to adhere to the sheet by the aid of heat and pressure.

In making our improved anti-friction cloth we take canvas, silk, or any other woven fabric, or paper or skins, and spread on an even covering of the anti-friction material, and cause the sheets so covered to pass between compressing-rolls, the upper one of which is heated sufficiently to soften and spread out, and at the same time condense and unite the compound, and press it on or into the sheets to effect the requisite adhesion.

In the accompanying drawings, Figures 1 and 2 are illustrations in sectional elevation, showing the invention applied under sliding and rolling friction. Fig. 3 is a section of a pair of compressing-rolls, showing the process of making the cloth.

Similar letters of reference indicate corresponding parts.

A represents a piece of cloth, or any equivalent substance, on which is spread a layer, B, of the aforesaid anti-friction compound. C represents the compressing-rolls, and D represents the cloth and the compound issuing from between the rolls in the finished state.

The upper roll will in practice be heated by any well-known means, so that it will heat and soften the compound sufficiently to cause the particles to unite together and to adhere to the cloth.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

As a new article of manufacture, anti-friction cloth surfaced with a mixture of graphite and sugar, secured thereto by heat and pressure, in the manner described.

LEBBEUS W. LATHROP.
THEODORE A. WEBER.

Witnesses:
T. B. MOSHER,
ALEX. F. ROBERTS.