

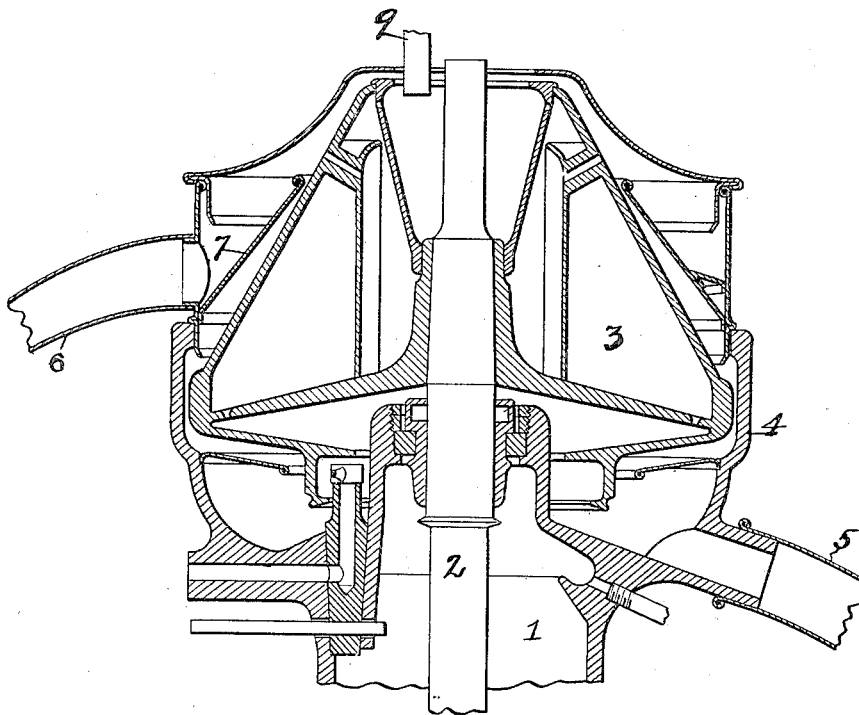
No. 649,753.

Patented May 15, 1900.

J. F. RHOADES & J. MORRIS.  
PROCESS OF SURFACING MATERIALS.

(Application filed Mar. 9, 1900.)

(No Model.)



Witnesses:

H. B. Hallock  
C. L. Rux

Inventors:

John F. Rhoades  
John Morris  
By W. C. Hays

# UNITED STATES PATENT OFFICE.

JOHN F. RHOADES AND JOHN MORRIS, OF PHILADELPHIA, PENNSYLVANIA.

## PROCESS OF SURFACING MATERIALS.

SPECIFICATION forming part of Letters Patent No. 649,753, dated May 15, 1900.

Application filed March 9, 1900. Serial No. 8,096. (No specimens.)

*To all whom it may concern:*

Be it known that we, JOHN F. RHOADES and JOHN MORRIS, citizens of the United States of America, residing at Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Processes of Surfacing Materials, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to an improved process of treating the surface of material, the object being to so treat a surface as to produce a smooth, uniform, and glossy finish and at the same time provide an effectual and inexpensive treatment of the same.

15 Our invention consists in applying to the surfaces of materials a coating of beef-blood which has been defibrinated and concentrated and to which has been added any suitable coloring agent. When used as a sizing for leather, a coloring agent to produce a black dressing is usually added to the blood, although the blood may be used in connection with leather of varying shades.

25 In the treatment of surfaces which are usually painted the defibrinated and concentrated blood is mixed with the oil and coloring agent, and it acts as a drier and filler, rendering the surface waterproof. It also causes adhesion of the paint and prevents flaking or peeling of the same. The quantity of defibrinated and concentrated blood used in paint will vary, according to the results desired. For instance, in treating the surface of tin roofing we use one-half pint of blood to a quart of paint, in treating brick walls one-half pint of blood to a quart of paint, and in treating flooring or other wooden surfaces one pint of blood to a quart of paint. While the foregoing proportions have been found to give satisfactory results, it will be understood that the proportions may be greatly varied, and we do not wish to be bound in this respect.

45 In preparing the blood for use in connection with coloring agents the blood as taken from the animal is agitated by hand. As the temperature is reduced the fibrin in the blood is collected and removed, after which the blood residue is concentrated.

50 As illustrating a device for concentrating

the blood reference will be had to the accompanying drawing, forming part of this specification, in which we have shown a sectional view of a centrifugal separator.

In the drawing, 1 denotes a portion of a support, and 2 is a central spindle on which the rotary bowl 3 is mounted. A casing 4 is formed with the standard, and near the lower end of said casing we provide a discharge-pipe 5 for the product. Near the top of the casing we provide a discharge-pipe 6 for the refuse matter, which is collected by means of the inclined plate 7. Blood is delivered to the bowl through the pipe 9, and the heavier and lighter products find their way to the discharge-pipe heretofore described, as is usual in centrifugal separators of this class. The blood is best adapted for use when it has a specific gravity of about 9° Baumé, although we do not wish to be limited in this respect, as our invention covers, broadly, the coating of material with animal-blood when its specific gravity is greater than in its natural state. After the blood is concentrated we add a preserving agent, which may be alcohol or any other well-known chemical which will answer the purpose. We find, for example, that two ounces of alcohol to a quart of blood produces favorable results, although other proportions may be used.

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

1. The method or process of surfacing materials which consists in subjecting the surfaces thereof to one or more applications of defibrinated and concentrated blood.

2. The method or process of surfacing materials which consists in subjecting the surfaces thereof to one or more applications of defibrinated and concentrated blood having a suitable coloring and preserving agent.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOHN F. RHOADES.  
JOHN MORRIS.

Witnesses:

MARY E. HAMER,  
E. H. FORSYTH.