

# UNITED STATES PATENT OFFICE.

ROBERT WOOD JOHNSON, OF ELIZABETH, NEW JERSEY.

## MANUFACTURE OF SURGICAL BANDAGES.

SPECIFICATION forming part of Letters Patent No. 426,590, dated April 29, 1890.

Application filed May 16, 1888. Serial No. 274,091. (Specimens.)

*To all whom it may concern:*

Be it known that I, ROBERT WOOD JOHNSON, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Surgical Bandage, consisting of a composition of matter, of which the following is a specification.

Heretofore plaster-of-paris bandages used by surgeons in dressing broken or fractured limbs, or in other cases where a splint might be used, have been manufactured by passing the strip of cotton or other textile through powdered plaster-of-paris, thus causing the plaster-of-paris to adhere to the textile material. In using these the surgeon first moistens them and then winds them about the broken or fractured limb. When dry, the bandages, owing to the hardening of the plaster-of-paris, become stiff and firm, and serve as a mechanical support to the injured part. As thus manufactured plaster-of-paris bandages are somewhat difficult to use, as the plaster-of-paris sifts out in handling. They also become inert with age, as the plaster-of-paris gradually absorbs moisture from the air.

My invention consists in a surgical bandage containing powdered plaster-of-paris with india-rubber or gutta-percha spread while in solution upon a piece of cloth or other suitable material.

In making this compound of materials I prefer to use the following process: I first

prepare a solution of india-rubber or gutta-percha by using volatile solution of common petroleum, the cheapest form being naphtha or benzine, although bisulphide of carbon does equally well. The proportions used are about one ounce of rubber or gutta-percha to one pint of the volatile solution of petroleum. When the rubber or gutta-percha is dissolved, I add about two pounds of powdered plaster-of-paris, and after thoroughly mixing the same I spread it upon a strip of cloth or other suitable material, and then expose it to the air until the volatile solution has evaporated. This bandage is then ready for use in the ordinary way.

In practice it may be found desirable for some purposes to vary the proportions from those above described.

I find that bandages made of this compound of materials are superior in that they hold the plaster-of-paris more firmly, require less care in handling, and are less apt to become inert with age.

What I claim, and desire to secure by Letters Patent of the United States, is—

A surgical bandage consisting of textile material coated with plaster-of-paris in a solution of india-rubber or gutta-percha, in the proportions substantially as described.

ROBERT WOOD JOHNSON.

Witnesses:

CHARLES M. STABLER,  
EDWARD M. JOHNSON.