

# UNITED STATES PATENT OFFICE.

ROBERT F. NENNINGER, OF NEWARK, NEW JERSEY.

## PROCESS OF MANUFACTURING COVERINGS FOR FLOORS, &c.

SPECIFICATION forming part of Letters Patent No. 353,059, dated February 22, 1887.

Application filed September 29, 1886. Serial No. 214,826. (No specimens.)

*To all whom it may concern:*

Be it known that I, ROBERT F. NENNINGER, of Newark, Essex county, New Jersey, have invented a new and useful Improvement in Processes for the Manufacture of Coverings for Floors, Walls, Trunks, &c., of which the following is a specification.

My invention consists in a new process for the manufacture of a covering for floors, walls, trunks, &c., which covering is composed of felt and paper, the felt forming the basis or principal portion, and the paper forming the upper or outer surface, upon which an ornamental design, if desired, may be impressed.

In another application for Letters Patent, Serial No. 214,825, filed by me simultaneously herewith, I have fully described and claimed the aforesaid covering as an article of manufacture, and therefore in my present application the same is not claimed.

A floor or wall covering composed, as aforesaid, of felt and paper is strong, elastic, durable, and when used on floors has the softness under foot of carpet, for which it is a cheap and efficient substitute. In its manufacture, however, the principal difficulty encountered lies in causing the paper and the felt to adhere. This is completely overcome by my process, which I carry into practical effect, as follows:

I first prepare paper-pulp in the form of paper-maker's slip from any suitable materials, including straw and wood and other vegetable substances. This in its usual thin liquid state is brought over a suitable screen, such as is used in paper-making machines.

The felt which is to be the basis of the finished covering is laid in a sheet directly over and upon the pulp. As the water escapes from the slip, leaving the pulp in a loose flocculent condition on the screen, the hairs or fibers composing the felt which are on its lower surface are drawn downward into and through the pulp. In this way the material of the surface of the felt is combined and interlocked with the pulp, so that felt and pulp are thus intimately bound together. The united materials thus form a composite sheet, which, after removal from the screen, is dried, impregnated with any suitable waterproofing compound, and finally the whole may be pressed or rolled to form a compact sheet.

I claim—

1. The process of making a covering for floors, &c., of felt and paper united, substantially as herein set forth, which consists in depositing the pulp from paper slip upon a screen and during said deposition placing the felt above and upon said pulp.

2. The process of making a covering for floors, &c., of felt and paper united, substantially as herein set forth, which consists in depositing the pulp from paper slip upon a screen, and during said deposition placing the felt above and upon said pulp, and impregnating the composite material so formed with a suitable waterproofing material.

ROBT. F. NENNINGER.

Witnesses:

EDGAR GOODWIN,  
P. BENJAMIN.