## A. W. CORDES.

FIRE PROOF CEILING.

No. 272,658.

Patented Feb. 20, 1883.

Fig. 2. Fig. 3. WITNESSES: INVENTOR

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## United States Patent Office.

AUGUST W. CORDES, OF NEW YORK, N. Y.

## FIRE-PROOF CEILING.

SPECIFICATION forming part of Letters Patent No. 272,658, dated February 20, 1883.

Application filed June 6, 1882. (No model.)

To all whom it may concern:

Be it known that I, AUGUST W. CORDES, of the city, county, and State of New York, have invented certain new and useful Improvements in Fire-Proof Ceilings, of which the following

is a specification.

This invention has reference to an improved fire-proof ceiling that is suspended in a simple and reliable manner from the wooden beams of the building, so as to protect the same in an efficient manner against fire; and the invention consists of plates of fire-proof material which are suspended from the beams by metallic bands or wires that are attached to the beams and to perforated lugs at the upper surface of the plates.

In the accompanying drawings, Figure 1 represents a perspective view of my improved fire-proof ceiling. Fig. 2 is an end view of the same, and Fig. 3 a simpler form in which my fire-proof ceiling may be suspended from

the beams.

Similar letters of reference indicate corre-

sponding parts.

25 A in the drawings represents the wooden floor-beams, which are to be protected against fire by a fire-proof ceiling formed of plates B B, of fire-clay or other fire-proof material. These plates are suspended from the beams by means 30 of metallic bands or wires C, of suitable strength, said bands or wires being attached at their upper ends to the beams and at their lower ends to slitted or perforated projections or lugs b, formed at the upper surface of the plates 35 B. The bands C are reliably secured to the slitted or perforated projections or lugs b, so that they cannot be detached therefrom, which may be accomplished either by turning over the ends of the bands, as shown in Fig. 3, or 40 by making the lugs b b of semicircular or U

shape, and of a width equal to the beam, and passing then a continuous band or wire, C, through the same, as shown in Figs. 1 and 2. To reduce the contact of the U-shaped lug b with the beam A, the faces of the same are 45 provided at suitable intervals with small transverse ribs, as shown clearly in Figs 1 and 2.

The fire-proof plates B may be arranged so as to overlap each other, leaving, however, sufficient space of dovetailed shape for the plas- 50 ter; or they may be suspended at a small distance from each other, as shown in Fig. 3, the ends being beveled, so as to form a dovetailed recess for the plaster. By suspending in this manner a series of fire-proof plates below the 55 beams of a floor a shield is formed that protects the wooden beams against the action of fire below, while a convenient, cheap, and easily-applied means is furnished, whereby warehouses, offices, and other buildings, wheth- 60 er in course of erection or already erected, can be readily changed into fire-proof structures at a comparatively small expense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent— 65

The combination of the wooden floor-beams with plates of fire-proof material which are suspended by metallic bands or wires at a suitable distance below the beams, said suspension bands or wires being passed through slot-70 ted or perforated projections or lugs at the upper surface of the plates, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in pres- 75 ence of two subscribing witnesses.

AUGUST W. CORDES.

Witnesses:
PAUL GOEPEL,

CARL KARP.