

(No Model.)

G. FUGMAN.
ROOF, FLOOR, OR CEILING.

No. 475,854.

Patented May 31, 1892.

Fig. 1.

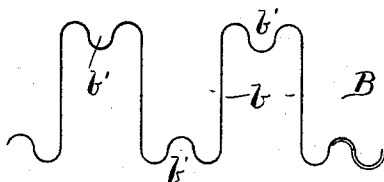


Fig. 2.

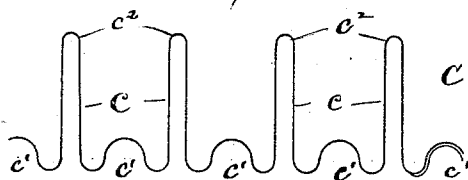
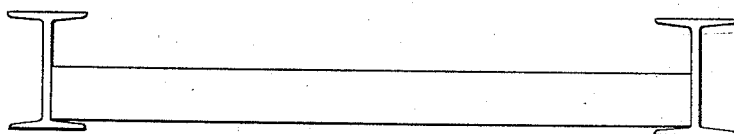


Fig. 3.



Witnesses,
E. B. Gilchrist,
[Signature]

Inventor,
Godfrey Fugman,
By *[Signature]* + *[Signature]*
his Attorneys.

UNITED STATES PATENT OFFICE.

GODFREY FUGMAN, OF CLEVELAND, OHIO.

ROOF, FLOOR, OR CEILING.

SPECIFICATION forming part of Letters Patent No. 475,854, dated May 31, 1892.

Application filed March 9, 1891. Serial No. 384,255. (No model.)

To all whom it may concern:

Be it known that I, GODFREY FUGMAN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Roofs, Floors, Ceilings, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in metal supports for roofs, floors, ceilings, &c., as between the rafters, beams, or main supports, whatever these may be, according to the construction of the building; and it consists in certain novel features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing my preferred form of construction. Fig. 2 is a modification, and Fig. 3 is a view in side elevation showing my improved metal support extending between two I-beams.

In the construction shown in Fig. 1, B represents a sheet of metal bent sinuously, and the sides *b* of the folds are preferably vertical. Sheet B, at the top and bottom of each main fold, has reverse curves at *b'* of such form that the vertical sides *b* are almost as deep as the entire structure. By this form of construction the strength of the support is much greater than that of the ordinary sinuously-bent fold which has been employed hitherto.

In Fig. 2 the construction is very similar to that just described. In this form sheet C has reverse curves at *c'* and short curves at *c''*, whereby the vertical sides *c* are about the full depth of the structure. These two forms are well adapted to support heavy loads and are used the one or the other, as may be preferred, according to circumstances. For instance, the form shown in Fig. 2 is desirable where the metal sheet C is not covered below, and gives a tasty appearance or neat finish below.

At the right hand in Figs. 1 and 2 is illustrated a convenient way of splicing the next adjacent sheets, and the overlapping sections may or may not be riveted together, according to circumstances.

What I claim is—

1. A metal support for roofs, ceilings, floors, &c., comprising sheets of metal bent into a series of folds having an arched connection at one end, said arched ends being reversely curved, substantially as set forth.

2. A metal support for roofs, ceilings, floors, &c., comprising sheets of metal bent into a series of folds, the sides approximately vertical and the ends arched and reversely curved, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 4th day of March, 1891.

GODFREY FUGMAN.

Witnesses:

C. H. DORER,
WARD HOOVER.