March 12, 1935. W. F. O'NEIL 1,994,322

FLEXIBLE HANGER

Filed April 12, 1934

FIG. 1

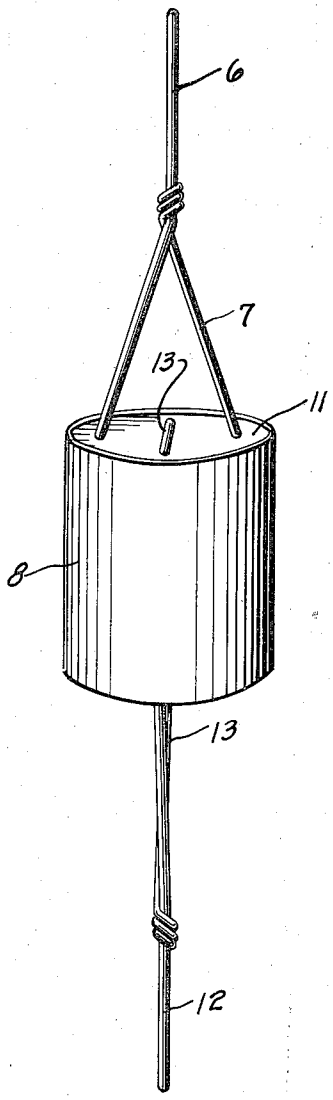


FIG. 2

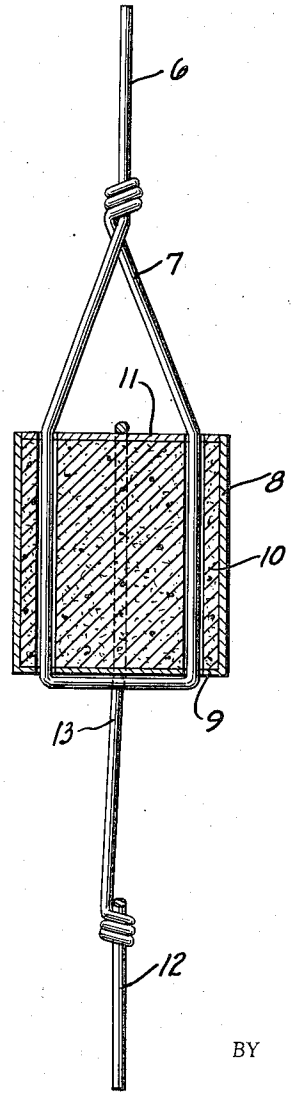
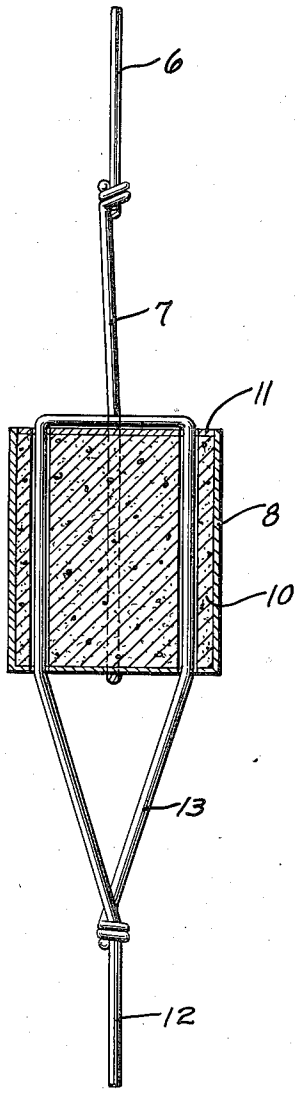


FIG. 3



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Patented Mar. 12, 1935 1,994,322

UNITED STATES PATENT OFFICE

1,994,322

FLEXIBLE HANGER

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Application April 12, 1934, Serial No. 720,193

2 Claims. (Cl. 72—118)

This invention relates to hangers particularly adapted for suspending a ceiling or similar parts in building construction, and has for its particular object to provide improved means to prevent or deaden sound transmission.

The use of such a hanger as this in construction work will tend to stop the reflection and conduction of incident sound impinging on the surfaces of such ceilings. Also, this type of flexible hanger installed in conjunction with ceiling work or otherwise in construction work, will allow freedom and tolerable movement of the ceiling, allowing it to act as a shock absorber and dampener on sound vibrations.

A further object of the invention is to provide a practical and inexpensive means of suspension. The device with modifications could be used and is adaptable to many other uses in the building trade.

The device will be found suitable and adapted to control sound transmission between floors and ceilings, by a simple and cheap construction.

One form of the invention is illustrated in the accompanying drawing in which Fig. 1 is a perspective view. Fig. 2 is a longitudinal section. Fig. 3 is a longitudinal section at a right angle to Fig. 2.

Altho illustrated in a certain way, the parts are capable of being made heavier or lighter or varied to regulate the tension and control the vibrations according to local conditions.

In the drawing of the particular form illustrated 6 indicates an upper hanger rod or wire which in use will depend from the floor or other supporting structure. This is provided with a loop 7 at its lower end, which extends through and supports a cup shaped metal casing 8, the branches of the loop extending through holes in the bottom 9 of the casing, and also through holes in a cushion 10 within the cup. This cushion or shock absorber may be rubber, cork, or any other resilient material or composition. Or it may be a coil spring or other device. The metal cover or washer 11 fits somewhat loosely within the top of the cup, upon the block of cushioning material or its equivalent, and the branches of the loop 7 extend through holes in the washer.

The lower hanger rod or wire is indicated at 12, and is intended to be attached to the ceiling structure or part to be supported, and this hanger has a loop 13 which extends through the cup, cushion and washer and is looped above the latter.

The cup or casing of cushion material is thereby confined or interposed between the upper and lower hangers in such manner as to form a resilient support and flexible hanger for a ceiling or the like, and the absence of a continuous metal connection between the floor and the ceiling will serve to prevent the transmission of sound vibrations, the cushion acting to absorb the same. Also, a desirable flexibility is provided, permitting the hanger to accommodate itself to slight variations in position and vibrations between the supporting and supported structures.

Obviously the dimensions of the parts may be varied according to the load or other factors, and also the length of the complete hanger may be varied according to local conditions, and it may be used in conjunction with various standard practices in the construction industry, and is adaptable to wood joists, I-beams, concrete, bonding and tying and various other uses.

I claim:

1. A hanger comprising a body of cushioning material enclosed in a casing, and a pair of oppositely extending wires the end of each of which is bent and coiled upon itself to form a loop extending back and forth within the casing and through the cushioning material, the respective loops being out of contact with each other.

2. A hanger comprising a cup, a cushion enclosed within the cup and resting on the bottom thereof, a cover on top of the cushion, an upper hanger rod having a continuous loop extending through the cushion and under the bottom of the cup, and a lower hanger rod having a continuous loop extending through the cushion and across over the cover, said loops being arranged at an angle to each other.

WILLIAM F. O'NEIL.