To all whom it may concern:

Be it known that I, FRANK F. FLEMING, a citizen of the United States, resident of Minneapolis, county of Hennepin, and State of Minnesota, have invented certain new and useful Improvements in Window-Sash-Weight Boxes, of which the following is a specification.

In the construction of a building it is customary to pack oakum, asbestos, or some non-conducting material under the sill and around the frame, but the weight pocket or box is left open and unobstructed to allow freedom of movement of the weights in opening and closing the window. It has been considered impracticable to put any non-conducting material in the weight box and the cold air is therefore free to circulate therethrough and enter the room.

The object of my present invention is to provide means whereby the outer or exposed wall of the box can be packed with some suitable non-conducting material which will check the entrance of cold air and at the same time will not in any way interfere with freedom of movement of the weights.

A further object is to provide a simple inexpensive means for packing the weight box which will not add materially to the cost of construction of the window.

The invention consists generally in various constructions and combinations all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification.

Figure 1 is a view of a double window partially in section with my invention applied thereto;

Figure 2 is a sectional view on the line 2—2 of Figure 1;

Figure 3 is a sectional view on the line 3—3 of Figure 1;

Figure 4 illustrates a modified construction;

Figure 5 is a perspective view showing the form of guard between the sash weights and the packing which I prefer to use as shown in Figure 4;

Figure 6 is a view similar to Figure 4 showing a guard adapted to lateral adjustment, mounted in the sash box;

Figure 7 is a perspective view of the guard shown in Figure 6 removed from the box, and showing how it may be adapted for weight boxes of different width;

Figure 8 is a similar view showing the guard composed of longitudinally adjustable sections to adapt it for weight boxes of different height.

In the drawing, 2 represents a window frame and 3 the sill. Two windows are shown arranged close together and comprising lower and upper sash 4 and 5. Between the windows is the usual box 6 wherein in the sash weights 7 connected respectively with the window sash are arranged in the usual way. The outer wall 8 of the box is exposed to the weather and a considerable amount of cold air may enter the box at this point and from thence pass to the inner wall of the box and the room where the window is located. To check this entrance of cold air into the weight box, I provide guards 9 having flanged edges 9a adapted to fit within the box and seated against the side walls and partially enclosing the weights and preventing the packing 10 from coming into contact with the weights or interfering with their freedom of vertical movement. These guards are preferably spaced apart as shown in Figure 2, the gap between them being packed with the non-conducting material and thus the air passage across the box is obstructed and the flow of cold air from the outside to the inside of the box is checked or interrupted. A retainer strip 9b may be secured to the wall of the box as shown in Figure 3 to retain the packing in the gap.

Figure 2 illustrates a double form of box or one in which weights are suspended for adjacent windows.

In Figure 3, the same form of guard is shown arranged in a smaller box and packed in the same manner as described with reference to Figure 2.

In Figure 4, a modified form of guard is shown indicated by reference numeral 11, the guard being channel-shaped in form and having its edges seated against the outer wall 8 of the box and with the flanges shown in Figure 2 omitted. A suitable packing corresponding to the material for this purpose in the other boxes is held in place by this guard against the outer wall and the flow of cold air into and through the box is thus prevented.

In Figure 5, I have shown the form of guard illustrated in Figure 4 removed from the box showing the flanges that fit against the outer wall of the box and the ears for
securing the guard at the top and bottom. This guard is adapted for boxes of standard width and height fitting between the weights and the outer wall and effectually excluding the passage of air across the box to the room.

In Figure 7, I have shown a guard composed of sections 12 and 13 mounted for relative lateral adjustment, the section 12 having transverse slots 14 to receive pins 15 on the section 13. The pins slide freely in the slots and allow the sections to be adjusted laterally one upon the other to adapt the device for weight boxes of varying width, as shown in Figure 6. Ears 16 are provided at the top and bottom by means of which the sections may be fastened to the top and bottom of the box.

In Figure 8, I have shown sections 17 and 18 mounted for longitudinal adjustment by means of the pin 19 and the slot 20, both sections having flanges 21 and 22 adapted to bear on the outer wall of the box and form a recess in which the insulating packing material may be placed. Ears 23 are provided on the sections at the top and bottom of the guard by means of which the sections may be secured at the top and bottom of the window. These guards are all preferably made of a suitable gage of sheet metal but I do not confine myself to this material as a heavy paper or any suitable fibrous sheet may be formed to fit the wall of the box and partially enclose the weights and separate them from contact with the insulating packing.

I claim as my invention:

1. A window having a sash weight box and weights suspended therein, a suitable non-conducting packing interposed in said box between the weights and the outside wall of the box, and a guard separating the weights from the packing.

2. A window having a sash weight box and weights suspended therein, a suitable non-conducting packing interposed in said box between the weights and the outside wall of the box, and a guard separating the weights from the packing, said guard being composed of relatively adjustable sections.

3. A window having a sash weight box and weights suspended therein, a guard having folded edges seated against the wall of the box and forming a space between said guard and the outside wall of the box and a nonconducting packing filling said space and preventing the flow of cold air across said box from the outer to the inner side thereof.

In witness whereof, I have hereunto set my hand this 5th day of April, 1924.

FRANK F. FLEMMING.