

Wire screens placed around the open window sash prevent injury to the passer-by

Passers-by Are Protected from this Open Factory Window

A MAN passing close to a factory wall, where one of those outward slanting windows happens to be open, might sustain a serious injury by knocking his head against it. An automobile

plant in Detroit has recently attached wire guards to its lower windows, so that, when they are open, adequate protection will be afforded against just such accidents. Our illustration shows how these guards are adjusted.

Aviators, Electrically-Clad, Defy the Cold

B-R-R-R! It was cold—so cold that the watch of a sentry in the Allies' camp had stopped. He pointed commiseratingly at the aviator who was soaring aloft in the driving snow storm.

"That fellow's going to suffer more than we are," he reremarked to a companion, "going way up among the clouds."

The sentry's sympathy did not seem out of place in view of the fact that at high altitudes (8,000 to 20,000 feet)

Clothed in this suit, the aviator has no fear of extreme cold

the temperatures are freezing, even in midsummer, and that some aviators who fight at 20,000 feet are as cold as the men who reach the North Pole. But, as a matter of fact, the airman was probably much more comfortable than the soldiers on the ground below him. For he was snugly clothed in an electrically-heated garment. Electrically-heated shoes kept his feet warm, and he wore an electricallyheated hood and gloves.

The garment was provided with three circuits or coils wrapped in the fabric of the cloth. They encircled his body. These circuits, which were parallel with one another, were distributed so that all parts of the garment were heated when they were connected up, a corresponding warmth being produced in the shoes, hood and gloves. The windings extended through a switch mounted on a thermostat made to expand under heat. In the insoles for his shoes as well as in the gloves and hood were wires connected with the windings of the garment. Current from a storage battery was supplied by adjusting a contact screw.

After a time the temperature of the garment rose to such a point that the thermostat began to expand. This oper-

ated the switch and as a result the contact point of one of the coils in the garment was drawn away from a contact point connected with the main circuit, cutting off the current. Further expansion of the thermostat cut off the circuit of another coil in the same way, and as the temperature continued to increase the heating power of the third winding was taken away. Then the temperature of the garment began to lower again, permitting the circuits to be reconnected. Thus the temperature of the cold dispeller was automatically regulated. The thermostat mechanism was enclosed in a casing and placed where the temperature of the garment caused it to operate.

So, you see, the sentry's sympathy was wasted. As a matter of fact, every aviator is clad to resist cold.

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