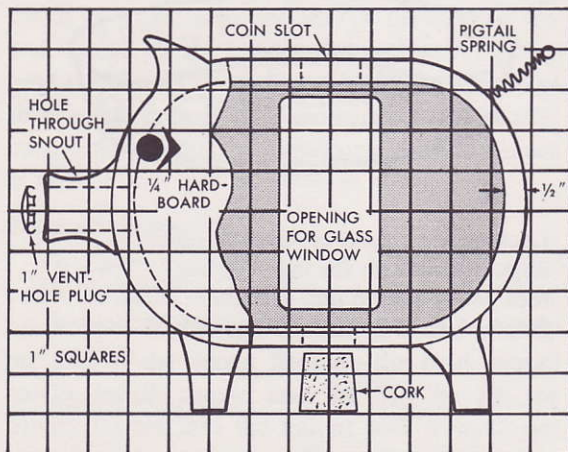
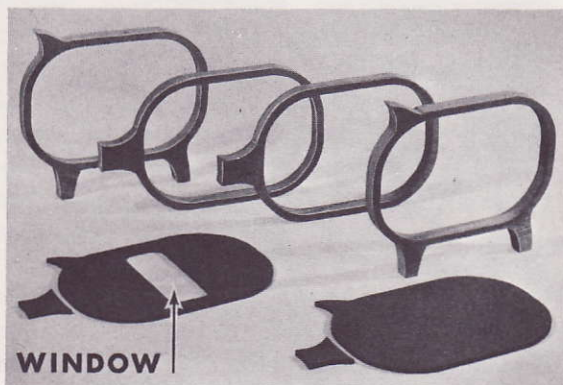


Piggy bank squeals on thief

BY TOMMY THOMAS



The pig consists of four rings (two with feet) cut from $\frac{3}{4}$ -in. wood and glued together. Cut the sides of the body from $\frac{1}{4}$ -in. hardboard or plywood. The optional window is held in place with contact cement. After gluing the rings together, drill holes for the cork and the vent-hole plug in the snout



■ TRY TO FILCH a coin or bill from Mrs. Tattle-tale and you'll be greeted with a loud squeal of protest. Her guarding voice is a buzzer that sounds off when tiny mercury switches, tucked insider her body, are tilted the least bit.

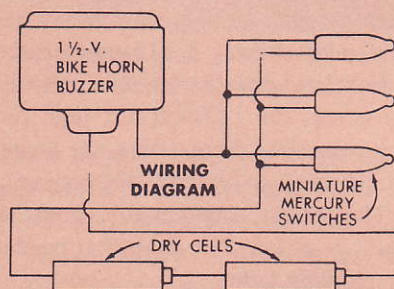
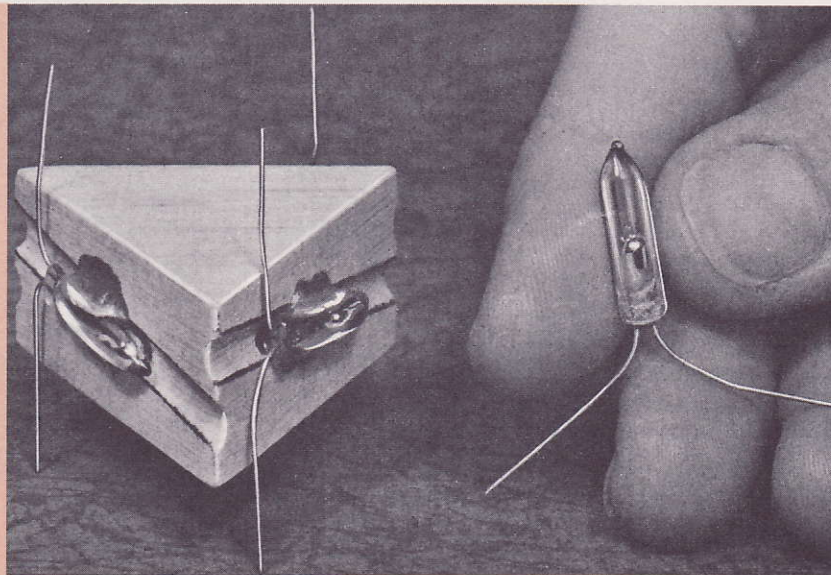
The buzzer, which should be $1\frac{1}{2}$ -volt, and no more than 2 in. in diameter, was taken from a bicycle horn. Power is from two $1\frac{1}{2}$ -volt pen-light dry cells. Note that the dry cells are connected in series, and that the bottom one stands in a hole in the cork, which also plugs the bank's access hole. A 1-in. pipe clamp under the coin slot protects the batteries from being damaged by falling quarters and half-dollars.

The three mercury switches are glued in "downhill" grooves filed in the sides of a $\frac{3}{4}$ -in. thick triangular wood block, $1\frac{1}{2}$ -in. long. To make the switches as sensitive as possible, find out by trial-and-error how close to horizontal the switches can be installed without activating the buzzer. The more gradual the incline of the switches, the more quickly they'll respond to movement. Cement the switch block and buzzer in place with epoxy.

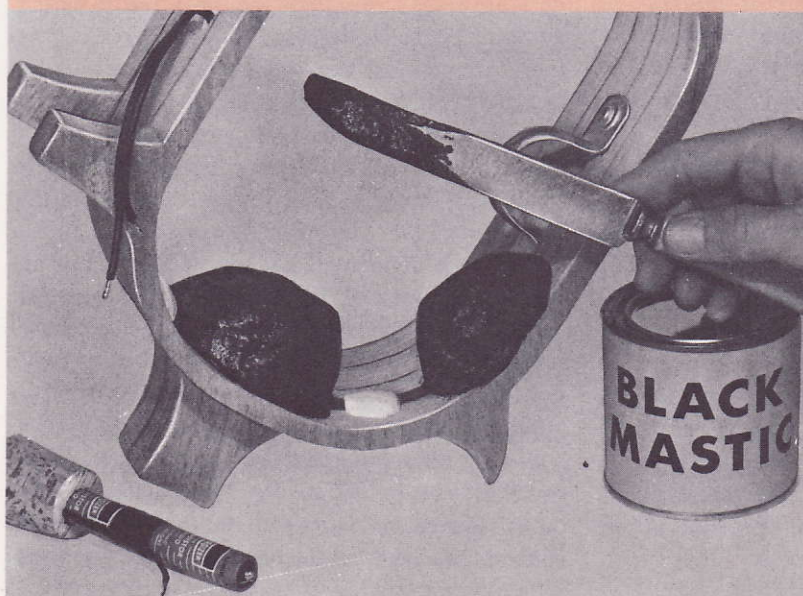
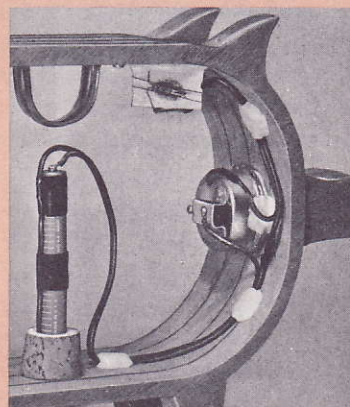
Wire the circuit according to the diagram. After testing, cover the buzzer and switches with heavy mastic to prevent coins from shorting the circuit. Make sure the mastic is the type that dries. The cork holding the dry cells is cemented last, after final sanding and painting. To empty the bank, just break out the cork. You can replace it when you start the next fund.

See also: alarms, burglar; alarm, power failures; alarm, temperature; electronics; safe; switches, light.

Mount the switches with epoxy. Be sure the longer wire inside each switch is on top. Cement the block inside the body with one switch forward



Wiring schematic: Connect the mercury switches in parallel, so that tilting any one of them will activate the buzzer. The batteries are in series. The buzzer must be aimed through the hole in the snout



Heavy mastic or cement keeps coins from shorting the circuit or damaging the buzzer and switches. Connecting wires are tacked on with epoxy