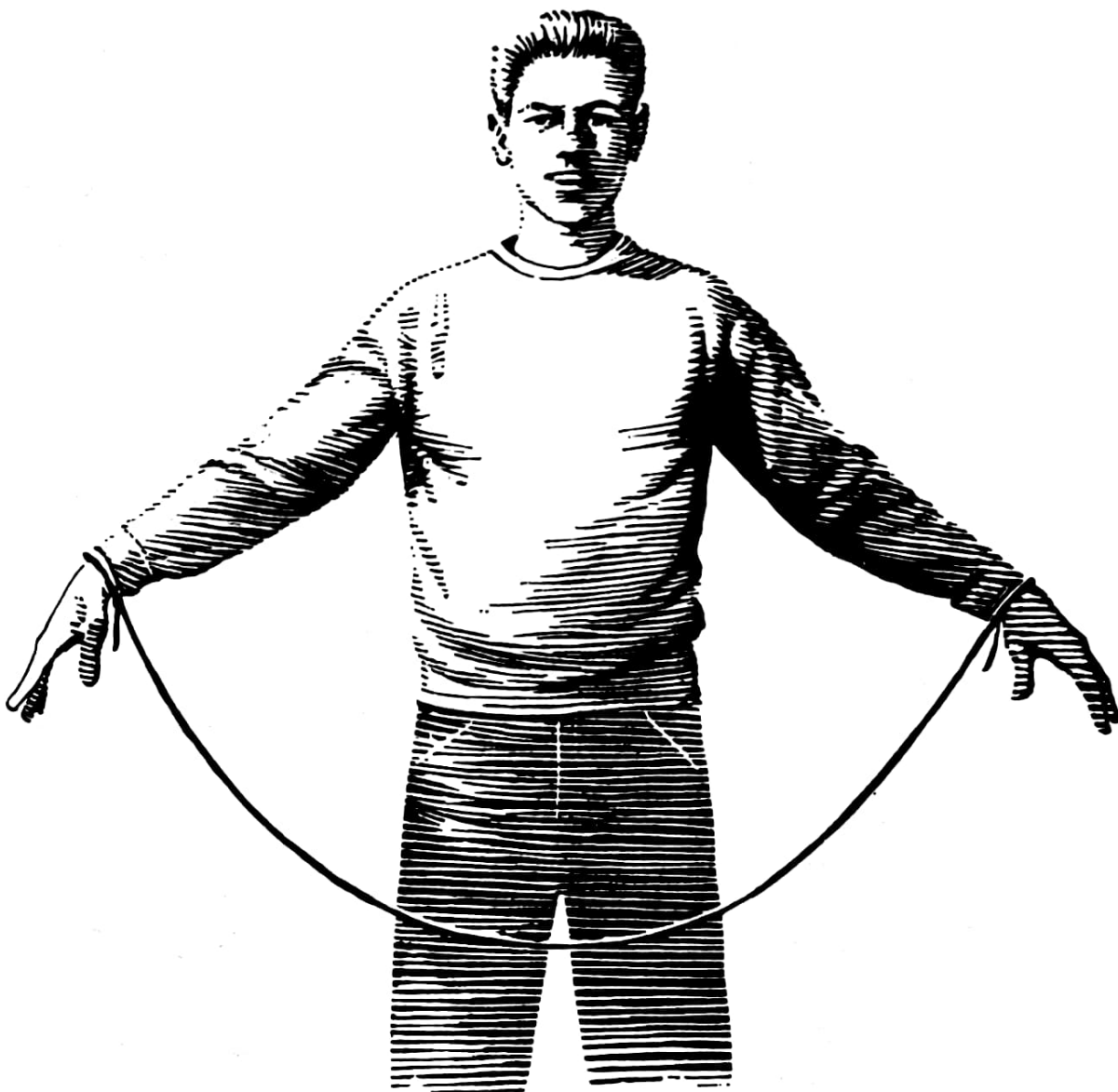


REVERSING THE SWEATER

IMAGINE THAT YOUR wrists are tied together with a piece of rope, as shown in the illustration, and that you are wearing a slipover sweater.

Is there any way that you can take off your sweater, turn it inside-out, and put it back on again? Remember, the sweater has no buttons and you are not allowed to untie or cut the rope.



SOLUTION

Yes, the sweater can be reversed as follows:

(1) Pull it over your head, reversing it as you do so, and allow it to hang, inside-out, on the rope as shown in Figure 1.

(2) Reverse the sweater again by pushing it through one of its sleeves. It now hangs on the rope right-side out (Figure 2).

(3) Put it on again, over your head, by going backwards through the actions by which you took it off. This reverses the sweater a third time, and puts it on your body inside-out (Figure 3).

Before trying it, see if you can visualize the process in your mind. If your sweater has a school letter sewn on the front, will this letter be touching your chest or your back after you have finished the three steps?

