A DEVICE FOR THE RAPID COLLECTION OF SURFACE-INCH SOIL SAMPLES

The surface inch of soil on mountainous range watershed lands in the West commonly contains much more organic matter than do the deeper layers. Because this concentration of organic matter greatly influences percolation of water and because erosion losses are largely surface losses, it is essential in many range-erosion investigations that the surface inch (or at least a shallow layer) be isolated and evaluated.

A simple and inexpensive shovel device that facilitates the rapid and accurate sampling of the surface inch of soil has been developed by the Intermountain Forest and Range Experiment Station. This shovel will likely be found useful to many workers in the field who have experienced difficulty in obtaining surface samples with the conventional types of geotomes or augers ordinarily used for sampling soils.

The surface-inch sampler, as shown in Fig. 1, is made of sheet metal and the cutting edge sharpened. Automobile fender steel of 18 to 22 gage has been found well adapted for this construction and is sufficiently strong to withstand driving when necessary in dry soil.

Fig. 1.—Diagram of hand shovel made of sheet metal for taking surface soil samples. The dimensions given are for surface-inch samples.