



Fig. 14. Two-wheel tractor - rotary hoe (Type: Mrovka / 3 h.p. / weight 50 kg / working depth 12 cm, working width 50 cm) - Manufacturer: Poland

These easily steered vehicles are adapted to nearly every tillage need. They break the ground, hoe and cultivate and can be provided with accessory implements to serve various purposes, e.g. mowing grass (Fig. 14). The two-wheel tractor can be converted into a three-wheel vehicle if a second axle is fitted. This vehicle is very helpful on small farms.

(3) Crawler Tractors

Where an extremely high engine power is required for operation on a soil of severe conditions, a crawler-type tractor should be used. This tractor moves by means of a track over which it rolls (Fig. 15).

The principle underlying the movement of crawler tractors can easily be understood if we imagine a heavily loaded cart which is to be pushed along on a loose sandy soil. However great the energy expended, it will remain difficult to move the cart because its wheels will sink into the ground. If, however, boards or iron plates are placed under the wheels, the cart can be pushed ahead with much less energy because the boards prevent it from sinking into the ground. The crawler-type tractor operates on this principle, laying its own track on the ground and easily rolling over it.

On the other hand, crawler tractors show several disadvantages, e.g. high fuel consumption, increased maintenance cost due to the wear on tracks, and poor manoeuvrability and performance on roads.