

IMPROVED HARVESTING METHODS

EQUIPMENT SURVEY NOTES

HAND-OPERATED SULKY

Several variations of a sulky designed for harvesting logs from farm woodlots are in use in Europe. These sulkies have been developed for use with horses or with farm tractors that are not equipped with winches. They can be used in several ways.¹

The sulky consists simply of an arched axle mounted on wheels, braces, a tongue, and a device for raising the logs. Although the sulky framework is fairly standard, the devices for raising the logs vary considerably. These devices are located at the top of the arch where the tongue joins the axle (fig. 1).

One of the simpler log-lifting mechanisms is a ratchet jack that is similar in operation to the common automobile bumper jack. Another operates on the rack-and-pinion principle. Still another device used is a hand-operated winch. It is also possible to use hydraulic lifts, either hand- or tractor-powered.

In operation, the arch is backed astride the end of the log. A chain or pair of tongs is attached to the log and the lifting mechanism. The log is then lifted clear of the ground by the lifting device.

Where horses are used, the sulky tongue is chained to the log before the lifting device is operated, and the skidding tongs or chain are attached to the log rather than to the sulky tongue. This reduces the strain on the sulky tongue so that light units can be used. This system makes it possible to use two or more sulkies with one pulling unit, and reduces hook-up time.

Rocks and grit that get into the bark during skidding are objectionable in many cases, especially in the stave bolt industry. To prevent this, two of these sulkies can be used to carry the log. In some cases, a bumper made from automobile axles is used to carry the front end of long logs and a sulky is used to support the rear end (fig. 2).

These sulkies vary considerably in design and manner of use according to individual conditions.

E. W. Fobes
December 1951

¹Handbuch der Forstkultur, Forstkultur Nordwest, Hamburg, Germany, 1951.



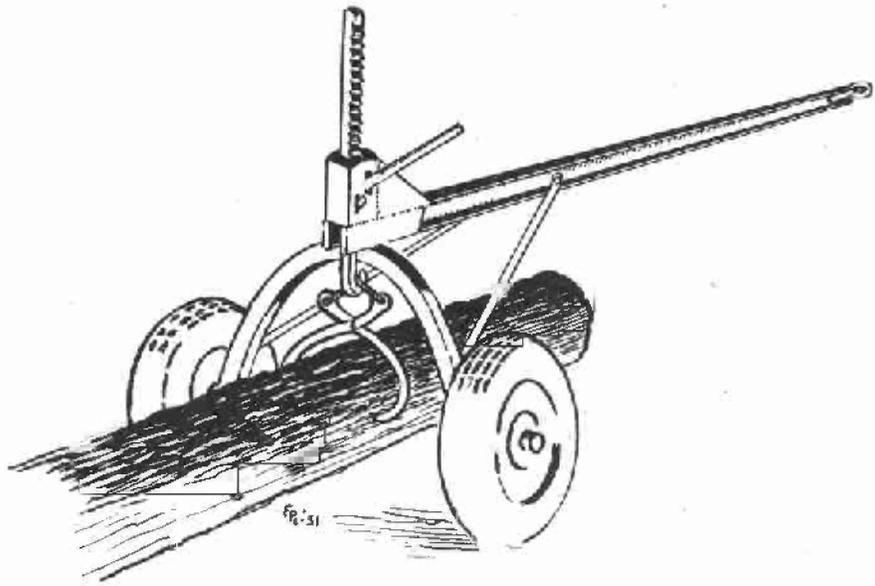


Figure 1.--Light weight, narrow-gauge sulky with a hand-operated mechanism for lifting the logs.



Figure 2.--Transporting logs with a sulky and bumper.