

259/4D

5th March, 1951.

Conservator (East)

The Oliver Sulky

I attach for your information
copy of a report on the above.



for Director (Scotland)

Col. Blenkinsop

This sort of development
has a strong on road
layout, and we should
not exclude it, or something
similar, from our ideas.

The theory, one assumes,
is to do the equivalent
of lengthening a horse
haul without a prohibitive
increase in cost per cwt.
using primitive tracks on
the normal surfaces.

Has Hager any data
on costs of the operation?

70

7.3.51

I think the real use for these
would be at the 3rd or 4th
thinning when they could be
substituted for the horse
haul.

Correspondingly for the
earlier thinning it might
be worth trying a much
lighter & handier form of
carriage combined with man
hauling to racks? R.B.

H.Q. Mechanical Development Report on
The Oliver Sulky (first prototype)

M.R. 1/6

Origin.

In the Committee's Report on the Cardiff sulky (Trial No. 25/1/1) it was mentioned that there is in many cases, a need for an intermediate stage between primary extraction from the stump to the ride and the nearest point reached by road vehicles.

The Cardiff arch type sulky designed for this role, was criticised due to limited carrying capacity which turned out to be less than a ton. A new sulky was, therefore, designed and produced by Messrs. J. C. Oliver Ltd. with greater capacity and including other minor improvements. This Oliver sulky carries the load from a jib instead of inside an arch. Photographs are attached to this report showing the Oliver sulky in operation.

Observations.

1. The sulky was first tried in the Thetford area where the general opinion was that the increase in size compared with the Cardiff type was a disadvantage. It was then transferred to Kielder where it was regarded as a "step in the right direction" in logging technique. This difference in opinions was probably due to the very different conditions under which the sulky was operated. Those at Thetford are abnormally easy and they are not those for which the sulky was primarily designed.
2. The maximum carrying capacity was found to be 30 cwts.
3. There were several minor points of criticism and these have been discussed with J. C. Oliver Ltd. who will submit another design embodying the following changes.
 - (a) Coupling between tractor and sulky to be swivelling in both planes.
 - (b) The bumper plate to be carried on a frame to the rear of the wheels so that the load will be clear of the tyres.
 - (c) The length of the jib will be increased to allow for b (above) and also provide a slinging position further from the butts.
 - (d) Wheels will be fitted with low pressure tyres to minimise sinkage on soft ground. The complication and cost of multi wheels will be avoided if possible.
 - (e) A skid pan will be provided to prevent the axle fouling stumps.
 - (f) Carrying capacity will be increased to at least 2 tons.

Conclusions.

The Oliver sulky seems to go a long way to meeting the requirement for an intermediate stage in extraction where ground conditions are soft and rough. Under the easy conditions of Thetford it is of less value.

Further Action.

A new prototype design of sulky embodying the lessons learned from this trial is now being produced by J. C. Oliver Ltd.

