

The whole landscaping operation is fully documented down to the date of each tree.

The planned road would cut through the avenue about 100 yards from its end before crossing the river. The route proposed by Mr Bagot and his advisers, which has been approved by the ministry on engineering grounds, would instead bypass the end of the avenue and would be screened from the rest of the park by a sharp bend in the river. It is maintained that this route would cost less than the original one, as the bridge would be 45 feet shorter than that planned by the MOT engineers, and that the only property to be disturbed would be the Brettargh Holt convent which would be cut in half. Although this would be unfortunate, the "Save Levens Park" movement considers that this is a small sacrifice for the preservation intact of one of the last surviving examples of seventeenth century English landscape gardening.

## BOTANY

### Roadside Botany

from our Botany Correspondent

CONSERVATIONISTS, farmers and highway managers met in London on March 14 to discuss the function and management of road verges. These three groups may have different priorities, but the amicable atmosphere of the symposium suggested that they have each other's interests at heart; all that is needed is cooperation for roadside verges to become a haven of rare and attractive plants while not interfering with the safety and amenity of what is described under Common Law as "a perpetual right of passage for the Queen and all her subjects".

Putting the conservationist's point of view, Dr F. H. Perring of the Biological Records Centre, Monks Wood Experimental Station, said that in many areas of arable lowland in England the verges represent the last vestige of grasslands which existed before the modernization of agriculture. The rich pastures of the past often survive only on unploughed and unsprayed verges. Many roadside verges also provide a habitat for some of Britain's rare plants. Dr Perring's group have found that at least twenty-seven of the three hundred rarest species grow on roadside verges; *Linum anglicum*, perennial flax, grows only in this habitat and the same goes for several other species. Clearly the loss of one roadside verge could mean the end of a species in Britain, and county naturalists' trusts have already stepped in and persuaded local authorities to protect the sites of some of the rarities when roadworks are in progress.

The farmers' concern is with preserving the safety of road users, keeping weeds out of the fields and maintaining good drainage, all of which are hampered when roadside verges are not cut regularly. The danger of weeds spreading into agricultural land from roadsides, however, is probably not as great as sometimes thought. Mr R. J. Chancellor of the Weed Research Organization, Oxford, described a survey of roadside weeds around Oxford and Chelmsford. Weeds clearly can and do spread to fields from the verges, but this does not seem to constitute any great danger. In no case was a verge found with a high density of weeds that were also found in adjacent fields.

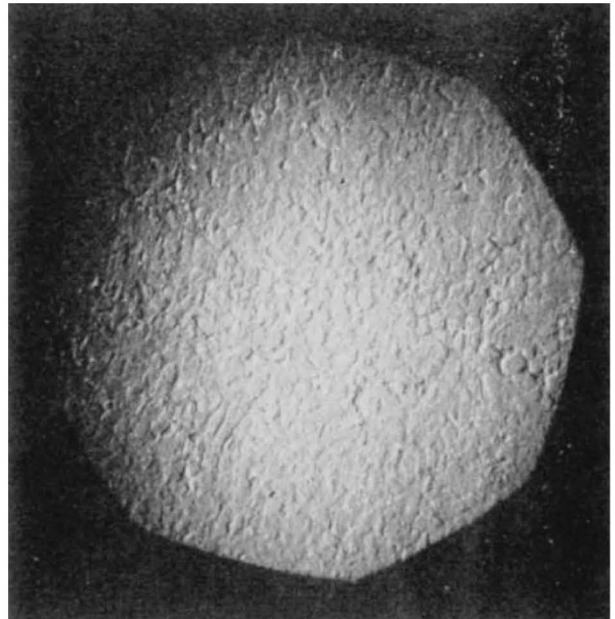
From the point of view of the local authority the

principal aims of the maintenance of road verges are to achieve good drainage of the highway, to provide space for pedestrians, to maintain good visibility for drivers, and to control the weeds listed in the Weeds Act, 1959. As Mr C. R. Chadwick, county surveyor of Wiltshire, said, this usually presents few difficulties on motorways and trunk roads, but on smaller country roads, where large scale clearance may be necessary, the situation is more complex. Several speakers bemoaned the passing of the village lengthman, who used to care lovingly for his own section of the road. Mechanization and sometimes chemical spraying have taken his place, and ecological effects can be drastic.

Local authorities seem to be very willing to respect as far as possible the botanist's wish to maintain a diversity of habitats on roadside verges and to conserve the rarities on them. It is up to local naturalists to offer advice when new schemes are mooted.

## METALLURGY

### Polished Brass



Micrograph of surface of brass specimen machined to a mirror finish in one operation at Philips Physical Laboratories, Eindhoven.

## SKIN

### Growth Control Mechanisms

from a Correspondent

How does an organ know when to stop growing? Professor W. S. Bullough of Birkbeck College, London, went some way to answer this question in a lecture to the Medical Society of the University of Newcastle upon Tyne on March 14. He said that, although the cells of a tissue have the potential for unlimited division, there is a balance between the rate of mitosis and the absolute size of the tissue, which implies a feedback system. Immediately after division, cells may either divide again or take up their tissue function, when