



CENTRAL OFFICE OF INFORMATION PHOTOGRAPH:  
CROWN COPYRIGHT RESERVED.

(See Feature Set Intro. No.296)

BIRMINGHAM PROTON SYNCHROTRON.

Under the supervision of Professor Marcus Oliphant, F.R.S., members of the Physics Department of the Birmingham University are constructing what will be one of the largest proton synchrotrons in the world. It will be used for accelerating protons to an energy of 1,300,000,000 electron-volts for use as projectiles in the study of nuclear structure.

It is hoped that, with the aid of the synchrotron, it will be possible to find some clue to the force which holds together the particles in the nucleus of an atom. Mesons will be produced in the collision of these energetic protons with the atomic nuclei. These mesons are particles with weights intermediate between that of the proton and the electron.

The proton synchrotron is to be used for fundamental research in nuclear physics and cannot have immediate uses in applied science.

D. 50205. (12). Copper cables lead from the generators to the main contactor (in cabinet) and then aluminium bus bars (on wall behind cabinet) go from there to the synchrotron. Our picture shows electrician Ben Baggot connecting wires on a terminal block in the contactor cabinet. He was responsible for the wiring of the installations in the generator room and also works on the general wiring of the synchrotron. In the left, foreground, can be seen the isolator switch which isolates either of the two generators, as required. The operating rod is hanging vertically between the two isolators. (6/50).