INSTRUMENT

IN THE SCHEME of Works production Section 15, Instrument Shop, is both a feeder and an assembly section. It lies between the main feed and assembly, taking from one and handing to the other, making in between all those complicated bits so necessary for the smooth flow of our equipment.

In this section parts are, so to speak, hand-made, and intricate mechanical components are produced and built up into sub-assemblies and complete instruments.

In this section, too, are done the jobs which are more economically turned out by hand, when only a small number is needed.

At the benches which run between the lathes and the Mounting Shop work instrument makers, many of whom have long experience with the Company.

Lately in evidence was a batch of stator castings for the Radiolocator Plan Position Indicator. Ball bearings, spindles and gearing were made and fitted to each machined casting to carry the drive which links the stator with the ship's gyro compass. All this enables a ship's officer to tell at a glance the bearing of any other ship or echo he has picked up. By taking a strobe of that echo the exact range can be read from a counter box.

On another bench were a batch of counter boxes being assembled from a complex assortment of spindles, hubs and gears.

Here we come to the building of the differential gears for the fine tuning coils of the aircraft transmitters, and to the complete gearing sub-assemblies for aircraft sets, most of which are made here and sent over to the Skating Rink.

The code-senders, devices by which the Trinity House radio beacons send signals automatically, were all assembled

*Setting the contacts of the code sender of an RB.*109 *radio beacon. Jack Stock, Foreman, Section* 15, *and Ron Bright*

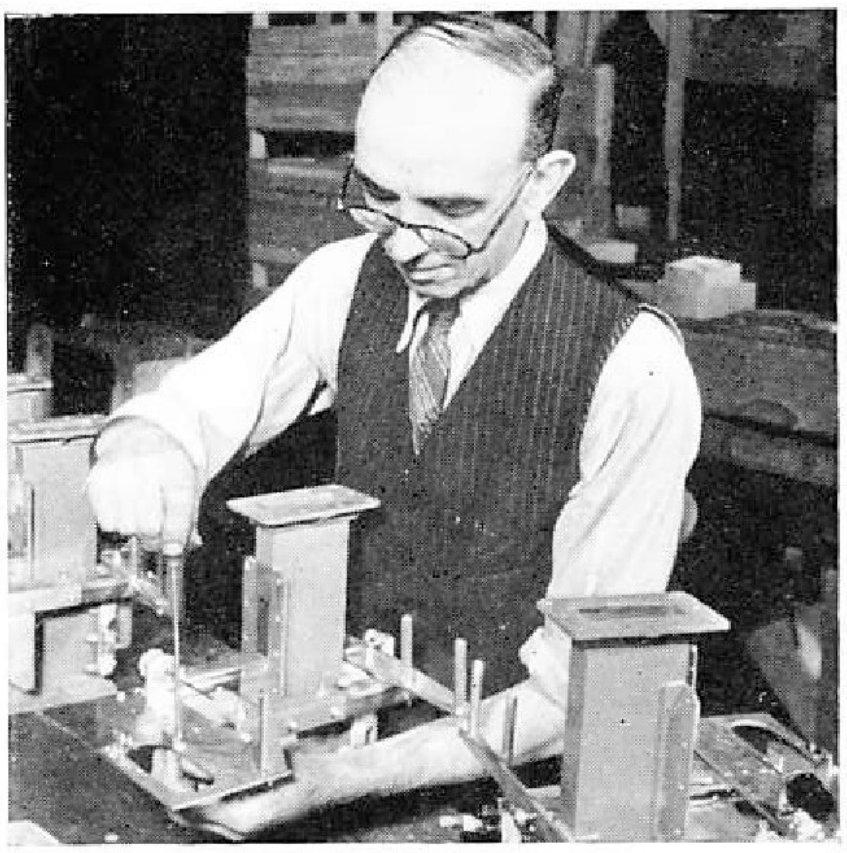
Bill Walden, chargehand (right), inspecting coils for an aircraft transmitter wound by Stan Perry

SHOP

in Section 15. Most of the detailed parts were made there. Rotating cams operate contacts to send by radio the Morse call sign of a lighthouse beacon. Most of those now installed round our coast transmit for one minute in six. But so treacherous are the seas about the North Foreland that this beacon must send out a signal for twenty-four hours a day.

Clocks for timing used in Time Recording equipment are made here completely except for glass and bezel. Crystal operated, the accuracy of the equipment is equivalent to the Astronomer Royal's time pips.

Of equal importance to the big jobs are the small ones which flow through this section. All sorts of pieces in small numbers; spring contacts, perspex windows, plates and brackets all keep the orders moving. Strip coils for S.W.B.8's, bent copper connectors for big transmitters, sockets for leads and even flexible joints for air ducts. Panels and coils for the TV cameras you are bound to see, as well as a Lodestone for the mariner, but what will strike you most is the skill and keenness of these expert craftsmen.



Ted Jinks, instrument maker for forty years with the Company, working on a mobile transmitter

Working on a counter mechanism for marine range finding equipment. Reg Giddings, chargehand, and Jim Chambers (right)

Fitting the ring assembly of a mobile transmitter matching unit. Tom Hockley, of twenty-five years' service