

## *The new look in telephone instruments*

A new telephone instrument with better hearing and speaking qualities, an improved dial and a volume control for its ringer is in final stages of development at Bell Telephone Laboratories. Incorporating new scientific principles, new technical art in applying them and new materials, pre-production models are still undergoing tests. It is expected that several thousands of the new sets will be manufactured this year and installed on a trial basis.

While nearly all of the more than 400 separate parts making up the set are of entirely new design, the new telephone will be completely interchangeable with telephones now in use and when the new set is connected with one of the current design, users of both telephones will benefit.

Major objectives in designing the new telephone were to provide, as economically as possible, better all-round service. An important feature is a novel "equalizer" which automatically adjusts the sound-level to compensate in part for the distance between the telephone and the central office. The dial on the new set has the numbers and letter prefixes outside the finger wheel and is sloped at a lower angle, affording better visibility.

Users are expected to be particularly pleased with the new instrument's ringer tone, which is both lower pitched and more resonant than that now in use. The unique volume control will permit the subscriber to adjust the loudness of the ringing tone

to suit his needs. At its loudest, the tone carries further than the present one; when muted, it is softer.

Weight of the new telephone's handset—the transmitter and the receiver and the handle on which they are mounted—has been reduced 25 per cent. Slightly smaller than earlier models, it is designed to provide a better fit to the head. All parts save those in the handset are mounted on the base, with the housing serving only as a cover. This arrangement of parts on the base is expected to facilitate manufacture, installation and maintenance.



*Denise O'Neill with the new 500-type telephone set*