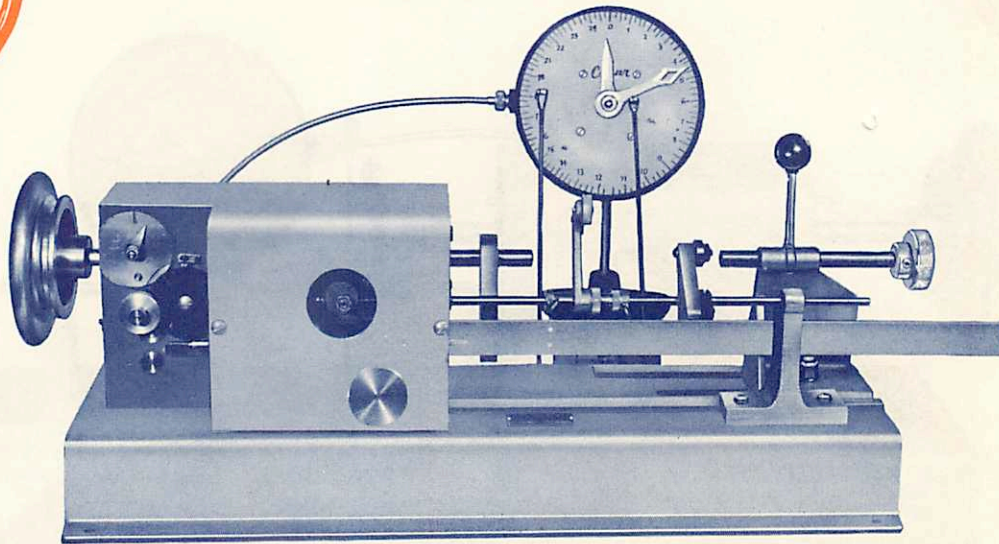


# Variable Gain Models



## MODEL **WX** COIL WINDER

In the past it has been impossible to secure a machine with complete ease of feed adjustments combined with extreme accuracy of calibration. This problem has been completely solved by the use of a continuously variable feed mechanism in our Model WX, the setting of which can be determined to an accuracy closer than one part in ten thousand. This adjustment is available for use in producing the complete range of coil patterns which are wound on our standard Model W design. A variable speed transmission is coupled to a differential gear box which has an additional input which can be used in various ways or locked in a fixed position. Since the output of the differential is available either in the cam shaft or for the rack and pinion feed, close adjustment of these traverses is possible. In addition, a special counting device indicates at all times the exact relationship between the input and the output of the differential.

The advantages of this design are particularly apparent in setting up and winding universal coils. The approximate number of crossovers is determined and the machine set accordingly. The gain adjustment is moved until a position is found at which a satisfactory pattern is achieved. When a coil of satisfactory structure has been wound, the two coun-

ters show the exact number of teeth required in the winding gears. Further samples may be wound, or the work may be transferred to any standard machine with the assurance of duplicate coils. A record made at the time the samples are wound will avoid any additional delay when a production order is obtained.

In winding bobbins it is not necessary to use any change gears and the rate of cam rotation is easily set, even while the machine is operating, by the turning of the adjustment knob. If desired, bobbins may also be wound in the usual fashion with the change gears, or both of these methods may be combined to provide fine adjustments of the fixed ratios.

When a satisfactory result is obtained by use of the feed or gain controls, the gear ratios can be read directly from the two dials. The results so obtained are exact, regardless of type of coil being wound.

Since this design is based on our standard Model W (head), the gainer mechanism may be disengaged, reducing the machine to a standard gear type winder.

Specifications for this machine are the same as the Model W for laboratory. (Available with the adjustable cam feature only).