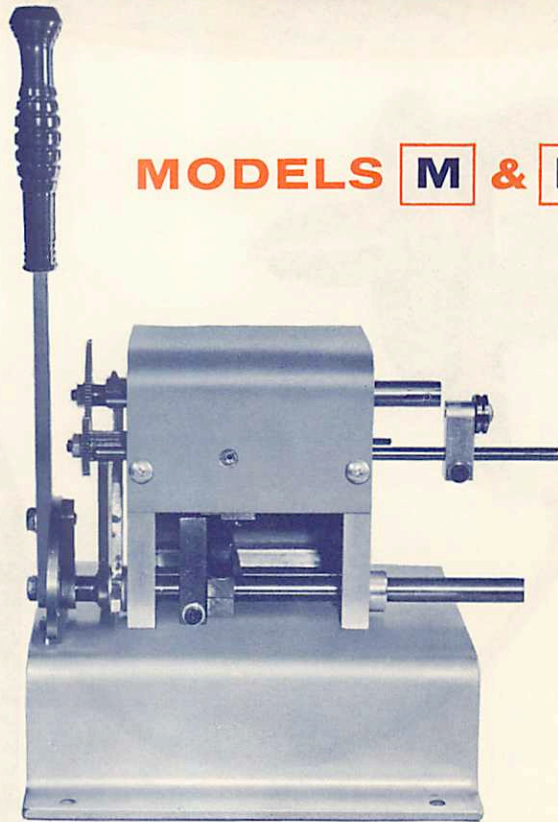


# Hand and Space Winders

## MODELS **M** & **MP**



For the fastest production of many hand-wound or space-wound coils of relatively few turns, we recommend one of these two hand-powered machines. One stroke of the lever turns the spindle the exact number of turns preset on the machine. At the end of the correct number of turns the spindle is locked in place until the handle is returned to the starting position.

Adjustment of the number of turns is made with a slotted segment which limits the arc of travel of the actuating mechanism. If a greater range of turns is needed, gears may be interchanged. Coils of 10 or 15 turns may be wound from rather heavy gauge wire without undue operator fatigue. The finer gauges may be wound with 45 or even as many as 60 turns for one stroke of the lever. Center-tapped coils of twice the number of turns may be wound using 2 strokes of the handle.

The Model M is the machine described above . . . set up as a basic hand winder for producing close-wound or other hand guided coils. This setup is particularly suitable for "preforms" or other "air wound" types.

The Model MP (pictured above) comprises the above mechanism set up with a simple cam controlled traverse. A wire guide moves along the length of the coil at a rate gov-

erned by an adjustable cam segment. This cam segment is so simple in construction that special non-linear progressions can be set up with the simplest tools. The wire guide returns automatically, to the starting position when the actuating handle is released.

Provision is made for the attachment of an indexing arm which can be used to convert the Model M into an efficient high speed semi-automatic armature winder. A similar device may be used for moving the wire automatically from "pi" to "pi" between coils. A properly shaped finger attached to this mechanism may be used for forming the final lead on spring-type coils, and this forming block drops away from the coil automatically for ease in loading and unloading.

These machines are designed for "top-away" operation, but provision is made for reversal of rotation without disassembly of the head.

These machines are built in the same frame as our Model L and can be supplied in a form similar to Model LL, if desired. The maximum traverse of the wire guide on the Model MP is 1 1/8". Typical applications produce as many as 4000 coils per day from one machine.

### SPECIFICATIONS

Bench Space 8" x 8" • Height to top of handle 16" • Net weight of machine—10 pounds