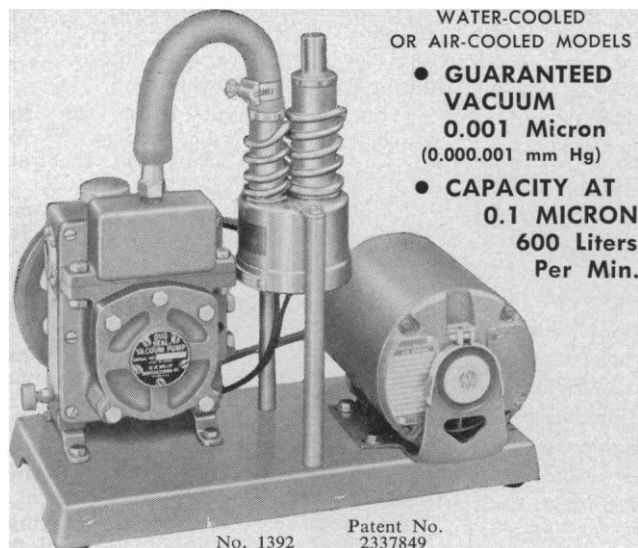


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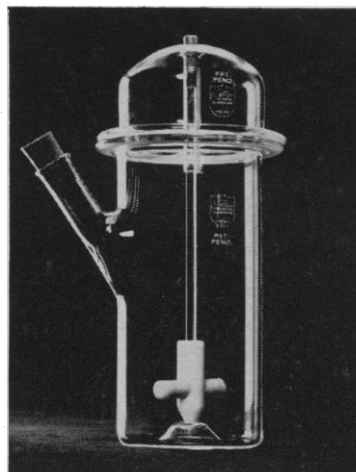
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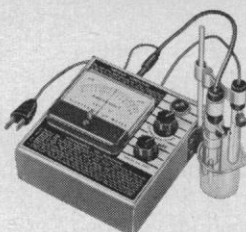
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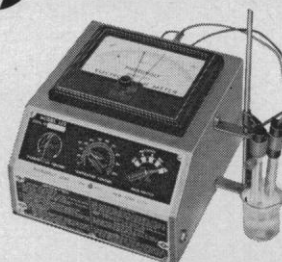


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Robert L. Bowman (R.L.B.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

Joshua Stern (J.S.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

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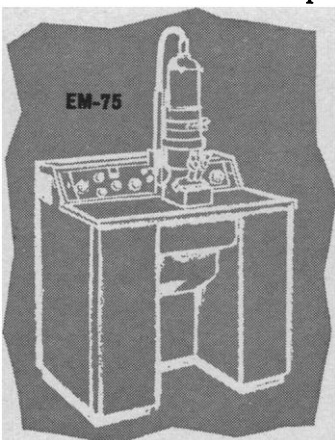
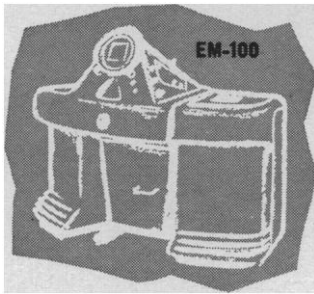
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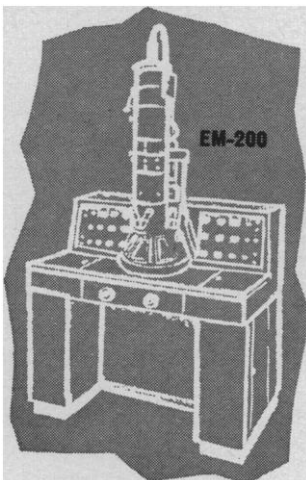
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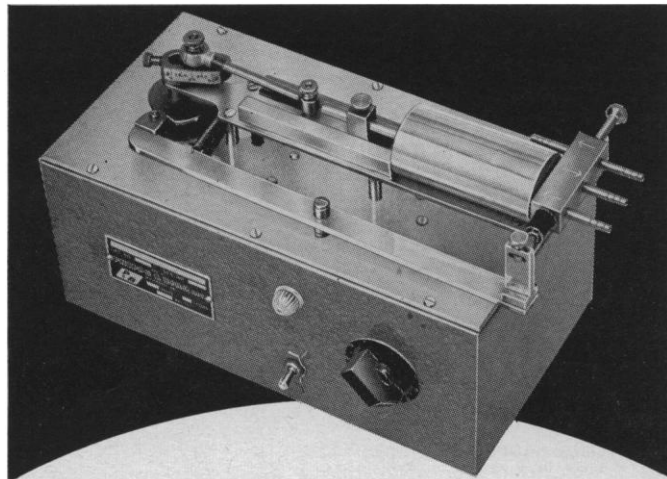
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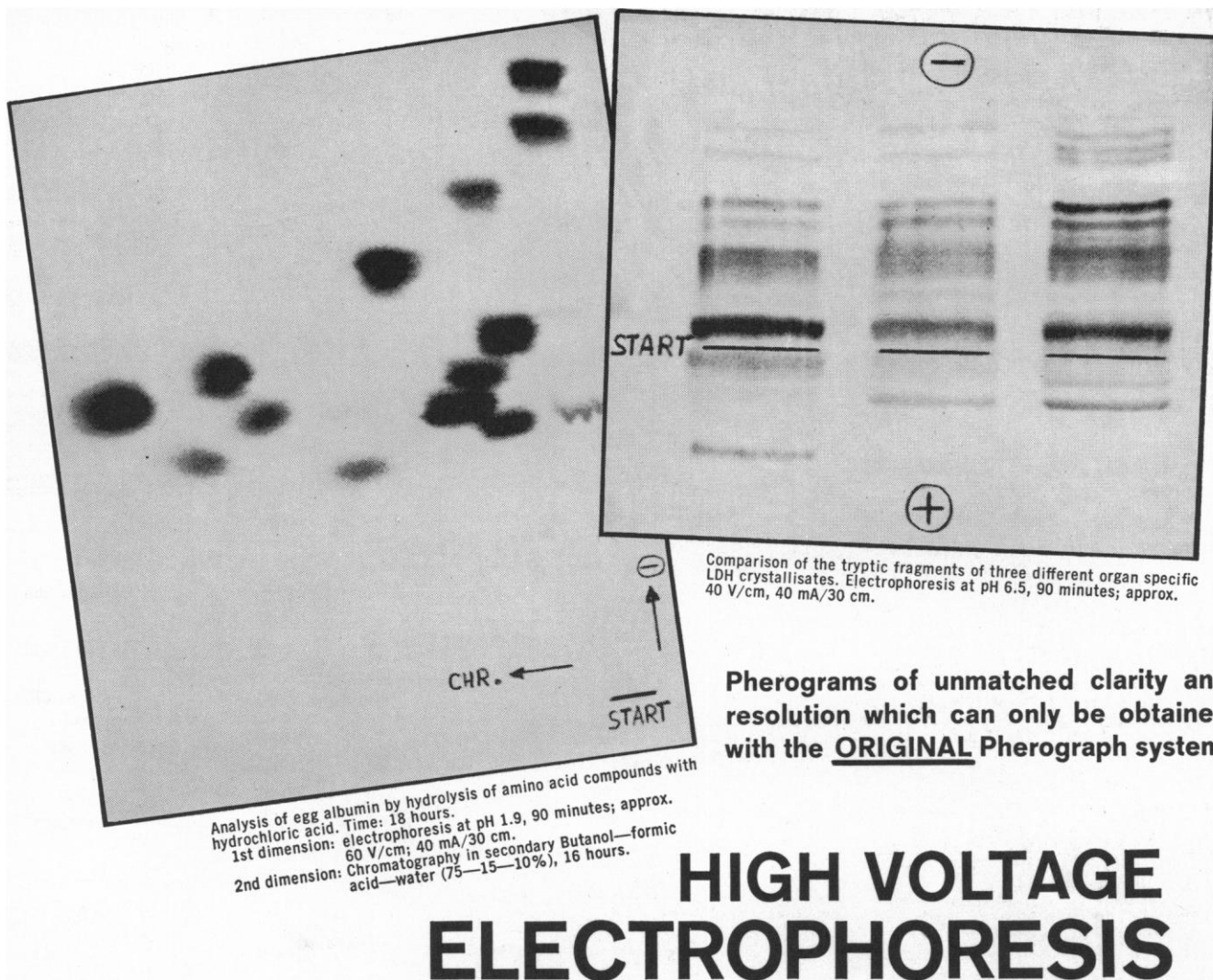
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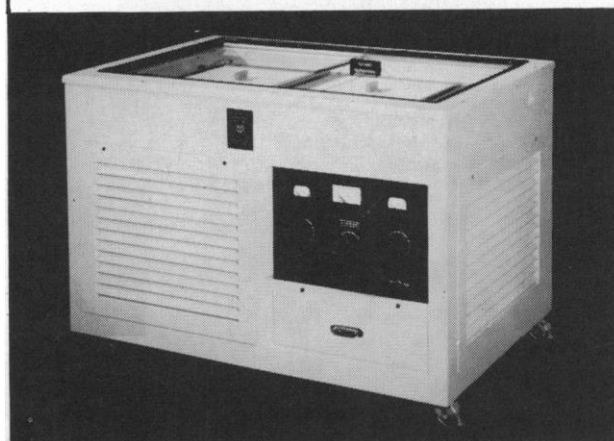


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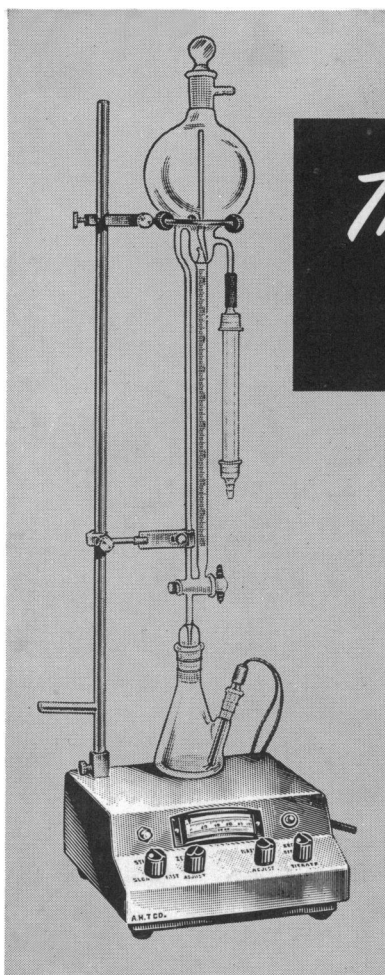
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Thomas Magne-Matic® Model Karl Fischer TITRATOR

- For manual "dead stop" titration of moisture
- Transistorized, battery-powered
conductometric circuit
- Pronounced deflection of meter at endpoint
- Built-in magnetic stirrer and provision for
introduction of serial samples

TITRATOR, KARL FISCHER, Thomas Magne-Matic.® For manual "dead stop" titration of water in solids, liquids and gases. Transistorized, battery-powered conductometric circuit produces a pronounced deflection of meter at endpoint. Suitable for all types of sample to which the Karl Fischer method is applicable.

The compact stainless steel housing, with built-in magnetic stirrer, and front-panel meter and controls, serves as a stable, corrosion-resistant base for the titration assembly. Buret support rod pivots to rear for removal of titration cell. Serial samples can be introduced through small vent hole in delivery tip hood, without disconnecting the assembly.

Suitable for:

ASTM method D-1364 for lacquer solvents and diluents

ASTM method D-1744-60T for petroleum products

Federal Test Standard 791, method 3253 for petroleum products

Principle. In "dead stop" titration, the marked change in conductivity of the solution, when all the contained water has reacted, is detected by the electrode circuit and is indicated as a persisting, *wide deflection* of the microammeter.

Controls. Include switch, pilot lamp and rheostat for magnetic stirrer, two meter limit trimming potentiometers, and rotary switch with power off, meter zero, meter maximum, and titration positions.

Meter. Graduated 0 to 100 microamps, in 2 microamp divisions.

Electrode Unit. Two heavy gauge platinum wires, sealed into the stem of a borosilicate glass standard taper 14/35 inner joint, extend 15 mm beyond tip of stem. Lead wires connect to jacks at rear of housing.

Buret. Automatic zero type, Class A, of borosilicate glass, capacity 10 ml in 0.05 ml divisions. Self-filling from overhead one-liter reservoir globe through 3-way stopcock with Teflon plug. Sidearm vent on zero overflow reservoir takes drying tube. Vented hood over delivery tip has standard taper 24/40 joint for attachment of titration cell.

Overall dimensions, 12 x 12 x 40 inches high; with four rubber feet.

9682-K. Titrator, Karl Fischer, as above described and illustrated, complete with automatic buret, titration cell, polyethylene drying tube with rubber tubing connection, support rod and clamps, two Teflon-coated stirring bars 1-inch long, two 1.5-volt flashlight batteries for operation of control circuit. Stirrer operates on 115 volts, 50 or 60 cycles a.c., 7 watts; with 3-wire cord with 3-prong plug and adapter. **\$15.00**



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