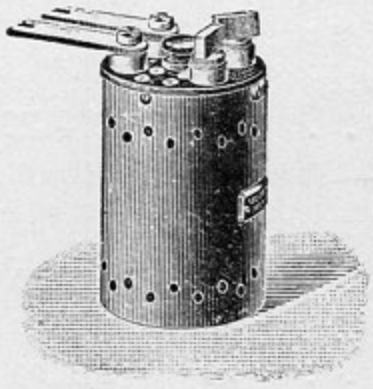
The Scientific Shop

ALBERT B. PORTER

Scientific Instruments 324 Dearborn St., CHICAGO

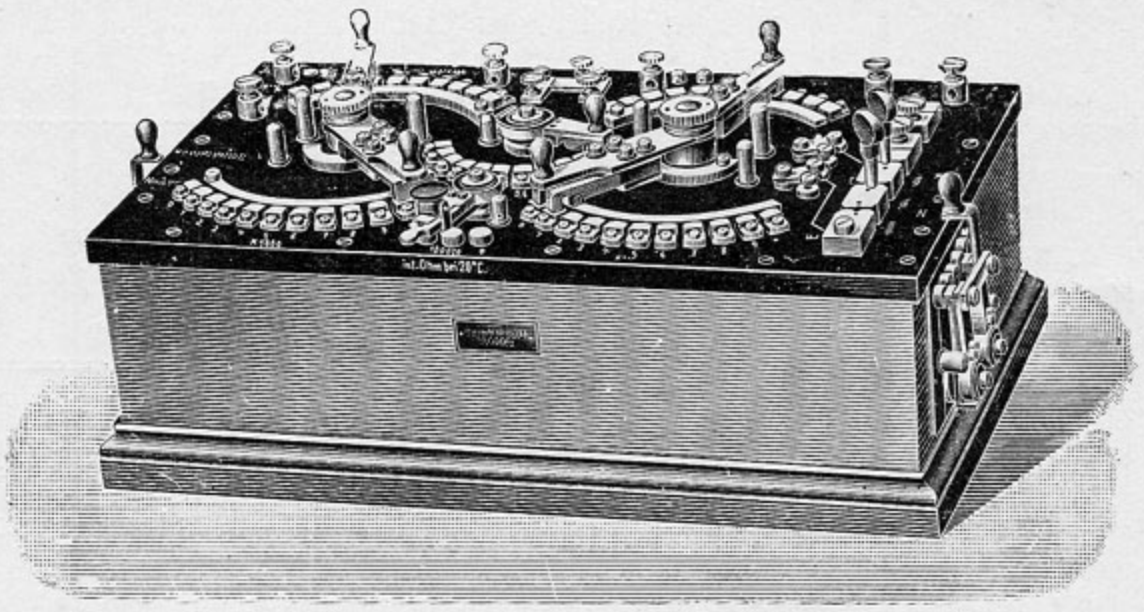
CIRCULAR 332 JANUARY 1907

Siemens & Halske A.-G.'s Potentiometer Standard Resistances

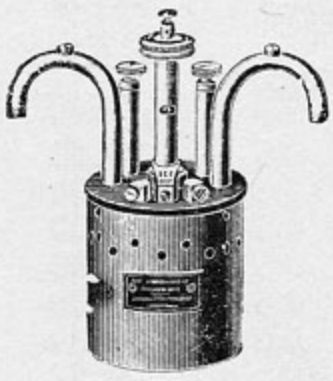


31377
Standard Resistance 6911 d
of 1 Ohm
with terminal connections

31386
Standard Resistance 6911
of 1 Ohm
with terminal connections



31370
Potentiometer
(without Regulating Resistance)



31392
Ratio Box
with Interpolation Resistance
6911 c I of 10 Ohms

31389
Standard Resistance
6911 a of 0,001 Ohm

Cat. No.	Article	Net Weight Kilos	Price $	Packing $
31370	**Potentiometer 6255,** for very accurate voltage and current measurements, with 2 ranges for voltages of 0,00001—10 Volts; in connection with the precision switch resistance, mentioned below, for 1—1600 Volts. Current measurements are made by measuring the potential differences at the ends of known resistances	14,5	**290.00**	2.00
	Accessories			
31371	**Normal Cadmium element**[1]) . . .	0,65	**16.00**	0.20
31372	**Switch resistance of 160000 Ohms 6901** (see Cat. No. 31422) . .	9,5	**176.00**	0.80

Small Standard Resistances (Pattern of the Physikalisch-Technische Reichsanstalt)

with Terminal-Connections

Cat. No.	Resistance Ohms	In the open air for Currents up to Amp.	In Petroleum for Currents up to Amp.	Drawing No.	Net Weight Kilos	Price $	Packing $
31373	10000	0,005	0,01	6911 d	0,8	**21.60**	0.20
31374	1000	0,05	0,1	„	0,8	**20.80**	0.20
31375	100	0,3	1	„	0,8	**19.20**	0.20
31376	10	1	3	„	0,8	**19.20**	0.20
31377	1	3	10	„	0,8	**19.20**	0.20
31378	0,1	10	30	„	0,9	**21.60**	0.20
31379	0,01	30	70	6911 d II	1,2	**24.00**	0.20
31380	0,001	100	150	6911 d I	1,4	**24.00**	0 20
31381	0,0001	200	300	6911 d	1,4	**24.00**	0.20

with Mercury-Connections

31382	10000	0,005	0,01	6911	0,6	**20.80**	0.20
31383	1000	0,05	0,1	„	0,6	**20.00**	0.20
31384	100	0,3	1	„	0,6	**18.00**	0.20
31385	10	1	3	„	0,6	**18.00**	0.20
31386	1	3	10	„	0,6	**18.00**	0.20
31387	0,1	10	30	„	0,6	**20.80**	0.20
31388	0,01	30	70	6911 a I	1,0	**29.20**	0.20
31389	0,001	100	150	6911 a	1,1	**29.20**	0.20

[1]) with certificate from the Physikalisch-Technische Reichsanstalt $ 1.25 extra.

Large Standard Resistances with terminal connections for current and voltage, cooling arrangement and turbine stirrer in petroleum bath;

with Terminal-Connections

Cat. No.	Resistance Ohms	In the open air for Currents up to Amp.	In Petroleum for Currents up to Amp.	Drawing No.	Net Weight Kilos	Price $	Packing $
31390	0,001	—	1000	6911 b	9	**124.00**	0.80

with Mercury-Connections

31391	0,0001	—	3000	6911 b I	15	**124.00**	0.80

Ratio Box with Interpolation Resistance of 0,1% its value

with Terminal-Connections

31392	2×10	—	0,3	6911 c I	1,0	**48.00**	0.20

with Mercury-Connections

31393	2×100	—	0,1	6911 c I	1,0	**48.00**	0.20

Cat. No. 31394 **Petroleum bath 6911 I** for cooling and measuring the temperature of standard resistances with 5 mercury cups and one turbine, suitable for 4 resistances, Cat. Nos. 31382—31389 . . . . . $ **44.00**

„ „ 31395 **Arrangement for comparing standard resistances 6911 II,** by the Thomson- or Wheatstone methods, with 3 petroleum baths, 2 turbines and 6 mercury cups . . . . . $ **68.00**

„ „ 31396 **Motor for 110 Volts,** with pulley for driving the turbine . . . . . $ **16.00**

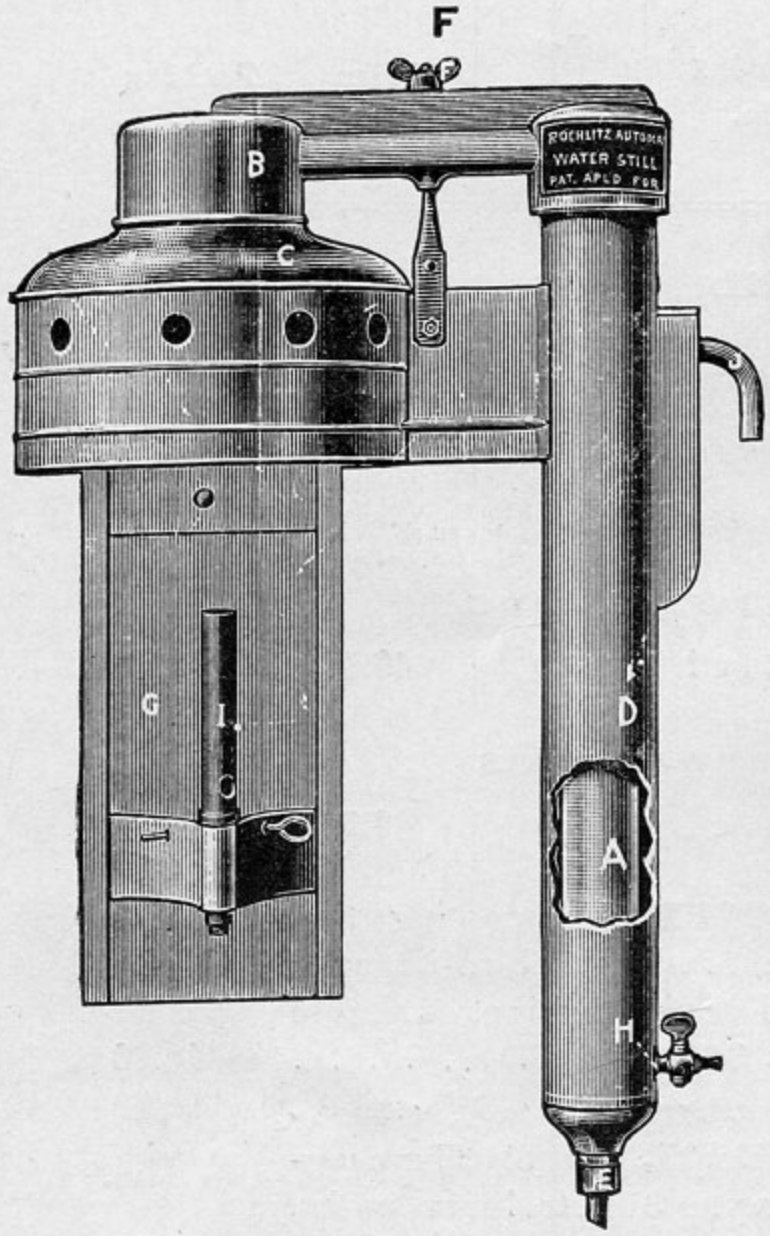
Changes in Prices.

Owing to trade conditions in Germany, prices of nearly all German-made apparatus have advanced from five to ten per cent. The great increase in the cost of platinum has also necessitated an advance in the prices of all instruments into which this metal enters to any extent.

Prices of electric furnaces given in Circular 313 are withdrawn. Prices of balances and weights in Circulars 314 and 346 are advanced by ten per cent., as are also the prices of C 825, C 829, and C 830.

THE ROCHLITZ
Automatic Water Still

PURE WATER FOR
The Laboratory, the Hospital and the Home



THE ROCHLITZ AUTOMATIC WATER STILL marks a distinct step in advance in the construction of automatic stills.

It is made of heavy polished copper and is *tin-lined* throughout.

It is convenient and economical, giving a half-gallon of pure and sterile distilled water per hour with a gas supply of from 8 to 10 cubic feet.

It is automatic. The constant level attachment always keeps the proper quantity of water in the boiler to secure maximum efficiency. After once the gas and water supply are adjusted, it needs no attention whatever, save an occasional cleaning.

It is easy to clean. The condenser (A) is connected permanently to the boiler cap (B); both can be removed together from the boiler (C) and condenser jacket (D) by removing the packing box and rubber gasket at E and the wing-nut F. The hole thus opened in the top of the boiler readily admits the hand for cleaning the boiler and the feed pipe.

It gives pure distilled water. The steam dome is so high that dry steam only can reach the condenser, and the construction is such that the feed water cannot be forced or siphoned over.

TO SET UP THE STILL, screw the sheet metal bracket G to the wall or other convenient support; then insert the flange on the boiler C into the grooves of the wall bracket G. Connect water supply to stopcock H and the gas to burner I, with rubber tubing. Connect a rubber tube to overflow pipe J, using tube of a diameter as large as that of the overflow pipe itself. Turn on the water, and after allowing it to run from the overflow pipe for a few minutes, light the gas burner I. The distilled water flows from bottom of condenser tube at A. The feed water should be regulated at the main supply pipe, not at the stopcock H, which is used only when dismantling the still to prevent the water in the condenser from spilling on floor. It is not necessary to have the condenser entirely cold from top to bottom; best results are obtained when the condenser is cold but one third the distance from the bottom.

Lower Prices. The steadily increasing demand for Rochlitz stills has been such as to warrant us in making them up in much larger lots than heretofore. The cost of manufacture has thus been greatly reduced, and we have been enabled to lower the selling prices by twenty per cent. The "Rochlitz" has long been the best still on the market and, at the reduced prices given below, it is now the cheapest.

C 33	**Still** with gas burner, as illustrated	**$12.00**
C 34	**Still** with gasoline burner	**16.00**
C 38	**Rubber Tubing** for gas or water supply, per foot	**.10**
C 39	**Rubber Tubing** for overflow pipe, per foot	**.20**

The above prices are for delivery, f. o. b. cars at Chicago.