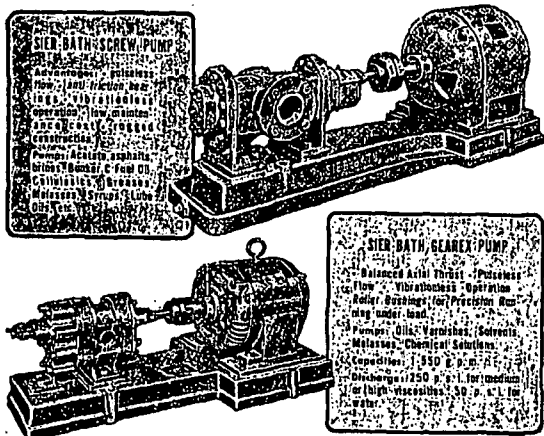


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worth a dozen in the repair shop!



The most notable point about SIER-BATH Screw Pumps and Gearrex Pumps is their relative freedom from maintenance.

THERE is no mystery about the ability of Sier-Bath Pumps to stand up under the most trying conditions. After all, in such pumps, the worms and gears are the most important parts. And when you consider that Sier-Bath Pumps are made in the best equipped precision gear shop in the country, it is easy to understand their exceptional dependability. Their pulseless flow and vibrationless operation greatly reduce maintenance cost—there is much less wear on valves, couplings and other fittings. Pipes and joints remain tight. With labor costs at their present high figures, these are important points to consider in pump selection. Send for descriptive booklet.

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hydraulic-power unit comprising a transmission and associated-stroke control. Frequency analysis acts as the tool for investigating effect of certain system parameters upon the performance of several power-unit components. ASME Paper No. 47-A-70.

Low-Pressure Steam-Heated Distilling Plants, by A M Impagliazzo, R M Benson, and G M Giamco, Rustell Co. The advantage of relatively high steam pressures in marine power plants superimposes a need for extremely pure feedwater on the old problem of supplying merchant vessels with pure water. Distillation by means of low-pressure steam-heated distilling plants offers advantages from both an engineering and economic standpoint.

This paper discusses these advantages. It touches on recent literature covering the economic side and then goes into the various equipments suited for distillation. ASME Paper No. 47-A-86.

Analysis of Tests on Positive Displacement Meters for Liquid Hydrocarbons, by S E Ambrosius, Pennsylvania State College. Characteristics of displacement-type mechanical meters when measuring liquid hydrocarbons constitutes the subject of this paper. It is a continuation of an earlier paper. Included are amplification of results and a method of analysis of data from tests conducted by the ASME special Research Committee and the American Petroleum Institute Topical Committee on Volumetric Research. *ASME Paper No. 47-A-72.*

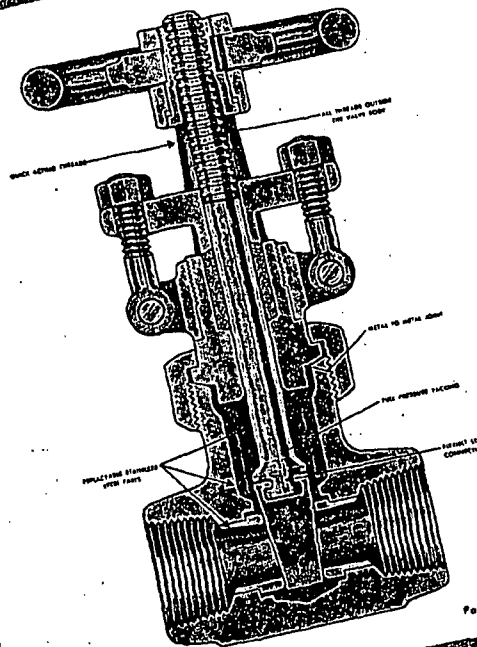
Flow in Conductors

(Continued from page 108)

through the circuit. In practice, however, even a small current requires coordinated drift of an inconceivable number of electrons. For example, in a continuous flow of one ampere, 63 billion electrons pass a given point in a circuit each second. This is known as an ampere-second or coulomb.

The little electron can be accused of responsibility for practically all electrical phenomena. All neutral bodies, that is those that do not manifest an electrical charge, have an equal number of electrons and protons in their structures. When a body has more electrons than protons it has a negative charge. Conversely, if a body is deficient in electrons it is positively charged.

Positive and Negative. It should be



Patent No. 1,866,29

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A Small Gate Valve That Will Stay on the Job

Here is a compact forged steel gate valve so ruggedly built that it practically eliminates the maintenance and replacement problem. Because no pressure is transmitted to the stem, it can be repacked under full pressure. Its quick-acting threads will not stick or freeze. It is supplied with super-hardened seats and plugs for extra severe services.

Made in sizes from $\frac{1}{4}$ " to 2"—carbon steel for pressures to 800 pounds; alloy steels for pressures to 1000 pounds at 750° F. For higher pressures, specify List 990.

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