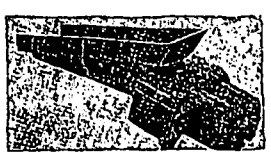
Equipment *Continued*

joint guards against overloading.

Standard feeder comes in 20-ft lengths. Capacities range from few hundred to several thousand lb per hr. An agitator is available for use with fine and "wet" coals. **Hager Bros, East PO Box 1511, Rockford, Ill.**

Regulating Valve E160

AIR WARDEN automatic pressure-regulating valve is for use on initial or primary air pressures up to 150 psi, and can be set to maintain reduced pressures ranging from 125 to 5 psi. Valve has built-in fine-mesh bronze strainer, instrument-type control knob for pressure adjusting, nylon valve seat, textile reinforced synthetic rubber diaphragm, and built-in pressure gage. The *Air Warden* is produced in two models: Model *RD-1* is for ⅜-in. piping, and Model *RD-2* is for ½-in. connections. **Hannifin Corp, 1101 S Kilbourn Ave, Chicago 24, Ill.**



Vibrating Feeder E161

ELECTRIC-VIBRATING FEEDER has an enclosed power unit for installations where the material is magnetic, hot, dusty and abrasive. In addition to being dust tight, it is also provided with air-inlet and outlet features. Thus a stream of air circulates through the motor and if necessary builds up a slight pressure that acts as double insurance toward keeping dust out. This power unit has adjustable supports that allow for changing the feeder slope from 5 deg upgrade to 15 deg downgrade, by loosening four capscrews on the support, and raising or lowering the deck end to suit. **Jeffrey Mfg Co, Columbus 16, Ohio.**

Hand-Powered Cutters E162

REDESIGNED LINE of hand-powered cutters have curved toe-in handles, broad, rounded palm-fit grips, no protruding screws or bolts, metal safety handle stop, 30% greater tool strength in sections and handles, jaws plainly marked showing capacity and type of metal safely cut. Will cut bolts, rods, wire, cable, chain, bars and metals of all kinds. **H K Porter, Inc, Somerville, Mass.**



Portable Repair Shop E163

HANDY-MATIC PORTABLE REPAIR SHOP is completely equipped for on-the-spot repairs. Power is supplied by a ½-hp motor for 110- or 220-v, 60 cycles, ac, with a flexible shaft drive. Available for 1400, 2400, and 4500 rpm with V-belt drive. Tools and accessories include attachments for sanding, drilling, wire brushing, grinding, buffing and sawing metal or wood. Complete unit weighs 100 lb, and is contained in a compact cabinet mounted on three caster legs. **Wyenbeek & Stuff, Inc, 838 W Hubbard St, Chicago 22, Ill.**

Lamp Capacitor E164

FOR POWER-FACTOR IMPROVEMENT of fluorescent lamps, these capacitors are listed by Underwriters' Laboratory, Inc, as meeting their requirements for correcting power factor of low power-factor ballast. These *Solar FF* fluorescent condensers are available in three ratings for operation at either 118, 208 or 236 v, 50-60 cycles, ac. Used singly or in recommended combinations, these capacitors will assure 85% power factor, or better. **Solar Capacitor Sales Corp, 1445 Hudson Blvd, North Bergen, N. J.**

Adjustable Troughing Idler E165

TROUGHING IDLER outer-inclined pulleys are adjustable from slightly above the horizontal up to an angle of 25 deg. All idler pulleys are in same vertical plane and adjustment of outer pulleys is made to maintain a constant gap between ends of horizontal and inclined pulleys. This gap is kept to a minimum to prevent creasing or pinching the belt.

Idler is for use on conveyors where inclined belt changes to a horizontal and at the feed and discharge ends of conveyors to allow the belt to be troughed or flattened gradually. This reduces strain on the belt by eliminating abrupt distortion of it when entering or leaving idler. **Koppers Co, Pittsburgh 19, Pa.**

Level Indicator E166

MAGNETIC TYPE INSTRUMENT for liquid-level indication consists of two separate, independently replaceable assemblies, each air-tight and weatherproof, so that it is impossible for fluid to reach or affect the scale. Outer assembly includes the enameled dial and indicating needle, which is directly mounted on a shaft carrying a permanent magnet. The body is a sealed unit enclosing another magnet directly coupled through a shaft to float arm. Any motion of float arm rotates body magnet which in turn displaces outer magnet and indicating needle. Instrument can be furnished with contact for low-level alarm. **Westinghouse Electric Corp, P O Box 868, Pittsburgh 30, Pa.**



Oxygen Recorder E167

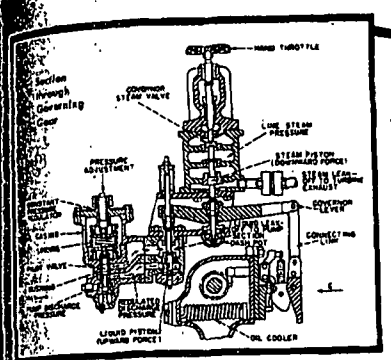
MICROMAX OXYGEN RECORDER checks on boiler combustion efficiency and serves as a guide for regulating excess air in furnaces such as glass tanks, cement kilns and open-hearth furnaces. Instrument operates on thermal conductivity principle. Oxygen analysis is by the hydrogen-difference method, which consists of adding hydrogen to gas sample, removing oxygen by combustion, and electrically comparing conductivity of sample before and after oxygen is consumed. Instrument is available with a round- or strip-chart recorder. **Leeds & Northrup Co, 4934 Stenton Ave, Philadelphia 44, Pa.**

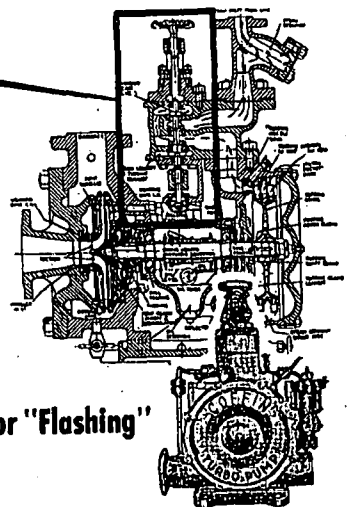
(Continued on page 158)

Use convenient reply cards on page 176a to secure additional information on these new equipment items. Please be sure to identify your request with the new-equipment key letter, E, and number, as shown on the items above.

COFFIN TURBO PUMPS

HIGH SPEED • SINGLE STAGE





5 No Damage from Loss of Suction or "Flashing" with the Coffin Governing Gear

Loss of suction empties the pump impeller, and discharge pressure drops. *Upward* liquid force diminishes and *downward* steam force throttles Governor Steam Valve, reducing rotor speed. With recovery of suction impeller fills, discharge pressure rises, and *upward* force opens Governor Steam Valve, restoring speed and output.

Standardized Boiler Feed Units for:

Steam Pressures to 650 PSI
Steam Temperatures to 850 F
Back Pressures to 60 PSI

Pump Capacities to 500 GPM
Discharge Pressures to 750 PSI (Heads to 1800 feet)
Liquid Temperatures to 300 F

UNIQUE FEATURES

1. Standardized Steam Turbine Centrifugal Pump and Governor Sets individually engineered, assembled, and tested for IMMEDIATE SHIPMENT.
2. No destructive casing erosion-corrosion.
3. No interstage leakage.
4. Wide range exact pressure governing.
5. Loss of suction reduces speed without tripping; automatic speed recovery with suction restoration.
6. High efficiency pump plus high speed two-bucket row turbine result in minimum steam consumption.
7. Matched Pump, Turbine and Governors under one responsibility.
8. Exact hydraulic and mechanical balance—light weight rotor—large bearings; result: bearing troubles practically unknown.
9. Pump Gland Leakoff provides adequate recirculation; suction pressure only on packing.
10. Rigid one-piece steel casing plus heavy shaft plus ample clearances result in no damage from dry operation.
11. All parts made to gage and replaceable without fitting; all parts in stock at factory with wearing parts available from agencies' stocks.
12. Proved for performance over a period of more than twenty years in service.
13. Compact, light in weight, quiet and low in maintenance.

Literature sent on request; specific proposals on receipt of operating data.

Representatives in Principal Cities

See our Catalog in Sweet's Power Plant and Engineering Files

INDUSTRIAL RAILROAD COFFIN MARINE PRODUCTS Founded 1923

The J.S.COFFIN, JR., CO. 328 South Dean St. ENGLEWOOD, N.J.