Product News

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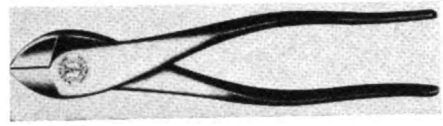
process is inkless, utilizing a special pressure sensitive paper. Various electrical scales are available or special meter scales can be made to order. **Rust Industrial Co., Dept. RSC, 130 Silver St., Manchester, N.H.**

High Leverage Plier

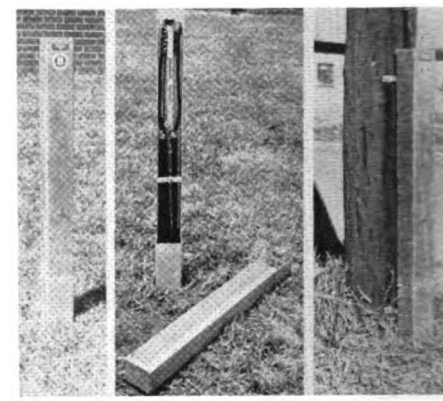
Mathias Klein & Sons have introduced a new oblique cutting plier designed with high leverage to do many



of the jobs too tough for a conventional oblique cutter to handle. "Handform" handles assure greater ease and comfort in cutting. Length is 8 in. Catalog No. 228-8. **Mathias Klein & Sons, Dept. RSC, 7200 McCormick Road, Chicago 45, Ill.**

Miniature Teletypewriter

An all-electronic miniature mobile teletypewriter by Kleinschmidt is designed for use in any type of mobile printed communications system. The receiver which weighs less than eight pounds consists of a printer measuring 11 in. by 5 1/2 in. by 5 1/2 in., and a separate control unit, approximately 6 in. by 4 in. by 2 in. The sender includes these units plus a keyboard. The machine is completely transistorized and selects characters and distributes signals electronically. **Kleinschmidt Division, Smith-Corona Marchant, Inc., Dept. RSC, Deerfield, Ill.**



Cable Terminal

A terminal case for making splices in and drops from an underground cable plant has been introduced by the Superior Cable Corp. The pedestal terminal consists of three parts: the channel-shaped riser portion, 72 in. long, which is driven into the earth approximately 42 in., and the cable or wires brought up along this riser; the groundline cover; and the upper cover. Sufficient space is provided for terminal blocks, loading coils, and cable protectors. Several sizes are available handling up to 150-pair cables. Pole mounted terminals are available for making junctions between the underground and aerial cable plants. The riser and the groundline cover are fabricated from No. 10 gauge steel and the upper cover from No. 16 gauge steel. **Superior Cable Corp., Dept. RSC, Hickory, N.C.**

New GRS Switch Machines

The General Railway Signal Co. announces the development of four new new electric switch machines: Models 5E, 5F, 5G and 5H. The machines incorporate new design principles and features, providing simplified operation, reduced maintenance, and designed-in frost protection. They meet all interlocking specifications and can be used at single switches, double-slip switches, movable-point frogs, and derails. They are compact, mount on only two ties, and fit the standardized switch layout. They meet the requirements of AAR load curve 1457 and provide ample thrust to operate the heaviest switches.

NEW GRS SWITCH MACHINES

Model	Operation	Controller
5E	Power only	External
5F	Dual	External
5G	Power only	Internal
5H	Dual	Internal

The machines are designed for relay control. The models 5E and 5F use separate, externally housed control and overload relays. The models 5G and 5H each have a built-in biased-neutral controller, which uses either 10 or 24 volts dc for control. They operate on either 24-32 volt or 110-volt dc operation. Operating time is approximately 10 or 3 seconds respectively. The models 5E and 5G are for power operation only. The models 5F and 5H, each equipped with a dual-control mechanism, are for both power and hand-throw operation. The models 5G and 5H each have an internal terminal board.

All machines include a snub circuit for dynamic snubbing of the motor at the end of each stroke. A ceramic permanent magnet provides a magnetic detent to hold the motor armature against drifting from vibration. Magnetic-flux linkage between a permanent ring magnet fixed in the housing cover and a similar magnet attached to the armature shaft holds the shaft securely after the dynamic snub stops armature rotation, or whenever energy is removed from the motor. Because there is no mechanical contact between the magnetic-detent elements, adjustments and replacements due to wear are eliminated, and frost cannot interfere.

A silicone-treated moisture-repellent cover surrounds the motor commutator to keep off moisture and to prevent frost accumulation. A transparent shield above the commutator deflects any condensation moisture, and protects against outside moisture when the compartment is open.

The point-detector contacts are knife edged and close with extra heavy pressure. This contact design and long contact wipe insure positive electrical contact despite possible frost on the contacts. The heavy-duty motor-control contacts in the models 5E and 5F carry and break motor current directly. The design of the gear train in the dual-control machines, models 5F and 5H, permits easy removal of the clutch without disassembling the dual-control mechanism. All machines are equipped with renewable box-style wear plates for the throw bar and for the lock and detector rods. **General Railway Signal Co., Dept. RSC, Rochester 2, N.Y.**

Tone Generator

Lorain transistor tone generators provide 600 cycles modulated at 120 cycles for low tone; 600 cycles for high tone; and 420 cycles modulated at 40 cycles for audible ringing tone.

These tone generators operate from 50 volts dc, and supply 400 milliwatts with a drain of 0.17 amp. They have no moving parts. **Lorain Products Corp., Dept. RSC, 1122 F St., Lorain, Ohio.**

Beam Power Tube

RCA-7212 is a small beam power tube designed specifically for applications where dependable performance under severe shock and vibration is essential. It is intended for use as an rf power amplifier and oscillator as well as an af power amplifier and modulator. The 7212 has a maximum plate dissipation of 25 watts under ICAS conditions in modulator service and in cw service. In the latter service, it can be operated with full input to 60 mc and with reduced input to 175 mc.

Because of its high power gain and high efficiency it can be operated with relatively low plate voltage to give large power output with small driving power. Small in size for its power-output capability, the 7212 has a rugged button-stem construction with short internal leads, a T-12 bulb, triple base-pin connections for grid No. 3 and cathode (both joined to internal shield inside the tube) to permit effective rf grounding, and a small wafer octal base with metal sleeve having its own base-pin terminal. The sleeve shields the input to the tube and isolates it from the output circuit so completely that no other external shielding is required. Separation of input and output circuits is accomplished by bringing the plate lead out of the bulb to a cap. **Electron Tube Division, Radio Corp. of America, Dept. RSC, Harrison, N. J.**