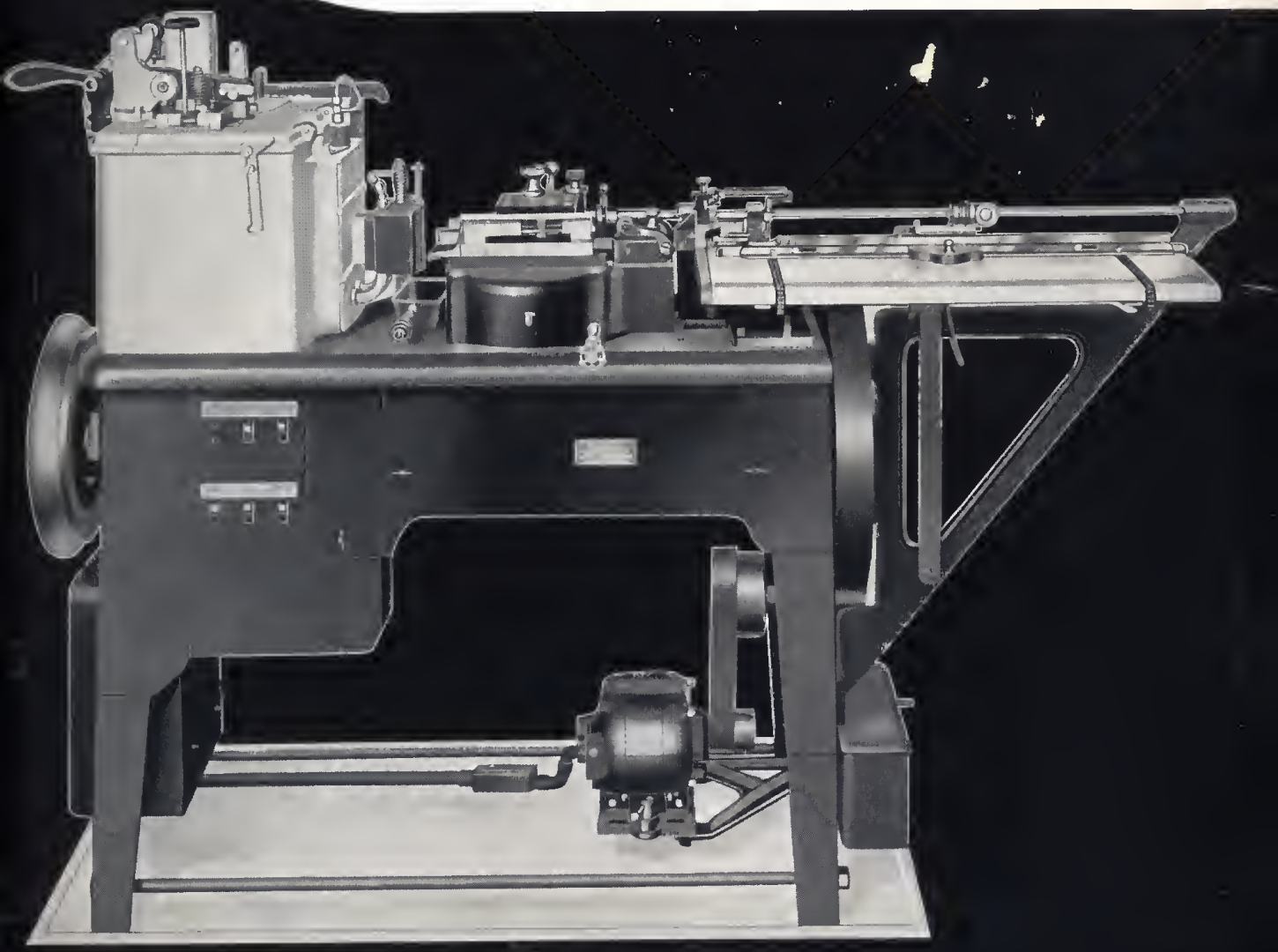
The ELROD

lead, slug, rule and base caster

. . . . for producing quality strip material at lowest possible cost



The Economy and E

The Value of Ample Strip Material

No composing room can operate economically and efficiently without an adequate supply of strip material—leads, slugs, rule and base. For, every few minutes during the day, compositors have need for strip material for one purpose or another—for rules, for spacing between lines and paragraphs, for make-up, for blanking out white space, for press lock-up, for foundry bearers, or for base.

If, when the compositor reaches for it, the needed strip is lacking, costly time is lost in looking for it, in locating it on another frame, or in piecing together shorter pieces of strip to serve the purpose. Or, more costly still, it may, after extended search, be picked from standing jobs, leaving these badly in need of attention when they are next brought out for printing.

A natural reluctance to make outside purchases not deemed absolutely necessary often causes shops which are without their own strip-casting equipment to keep on hand for the use of their compositors a less-than-adequate supply of leads, slugs, rules and base. The loss in time and money from such shortages will, in most instances, more than cover the cost of putting in and operating an Elrod.

Composing room executives who have cured the evil of strip material shortage by putting in their own Elrod equipment testify to the noteworthy and often surprising economies which have resulted.

The Elrod Supplies the Need

With an Elrod on the floor, strip material is produced so easily and economically that the bins for leads and slugs are kept filled. An ample supply of thicker strip is kept on hand for cutting to any desired length. So, when the compositor reaches for a piece of strip, he finds it there—ready for use in the form on which he is working. Thus composition proceeds on the most efficient basis, with much time and money saved.

The most economical means of maintaining an ample supply of strip is by operation on your own floor of simple and efficient strip-casting equipment for producing an unlimited supply of new and accurate leads, slugs, rules and base. The Elrod perfectly fills this prescription.

Many plants whose strip material requirements are fully supplied by operating the machine only part-time report that they nevertheless have found the Elrod highly profitable.

Right in Principle

The Elrod is a simple, sturdy, easily operated machine for casting strip material in sizes from 1-point to 36-point in thickness. With its movement accelerated and sustained by plunger pressure, the molten metal in the crucible is formed into a continuous strip as it passes through a water-cooled mold which performs the dual function of solidifying and shaping it.

The metal enters the mold liquid, and, cooled by water circulating through a jacket around the mold chamber, is delivered as a continuous one-piece solid strip. The internal cross-section of the mold determines the thickness and height of the strip, and, in the case of rules, the ruleface and its relative position on the body.

Elrod strip is not formed compositely of successively cast individual sections each of which is joined by more or less complete welding to the fully formed rear wall of the previously solidified preceding section. With the Elrod, an always-continuous mass of metal, molten in the crucible, is progressively cooled and solidified under pressure while passing through the mold and thus is formed into a solid and continuous one-piece strip of unlimited length.

The Elrod is the only strip-casting machine operating on this principle, which is truly important for the prospective purchaser of strip-casting equipment to understand. For the fundamental rightness of this principle makes possible the simplicity in operation and mechanism of the Elrod machine, and the solidity, strength and uniformity of the Elrod product.

Mechanical Simplicity

In design and construction, the Elrod is simple. There are relatively few moving parts, and these travel in simple, easy motions, with minimum shock, noise and wear. There are no delicate adjustments requiring constant attention. All bearings are ample in size and readily accessible for lubrication. The Elrod is designed for long-time service and satisfaction.

Simplicity of Operation

The Elrod is simple and easy to operate. In a short time a man of average intelligence can learn how to operate the machine and produce satisfactory strip, although special skill and adeptness are of course gained from wider experience. With the mold properly set in place and sealed in, the machine once started will run for hours at a time with little attention other than occasionally to replenish the supply of metal in the crucible and to remove the accumulated product from the delivery table.

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It is not unusual for the Elrod to be kept in operation by a man having other duties in the shop. In any event the simplicity and ease of operation contribute importantly to the low production cost of Elrod strip material.

Range of Product

With a single machine, the Model F Elrod, the composing room produces type-high rules, and spacing or base material of any desired height, in the full range from 1-point to 36-point in thickness. The machine may be set to cut off the strip to the desired measure, as produced. Every strip requirement of the composing room is thus provided for by a single piece of equipment.

With an improved Model E Elrod, the same variety of strip material up to 18-point in thickness is produced. This model meets the needs of the

fficiency of the Elrod

commercial printer who may not require strip material exceeding 18 points in thickness.

In Standing Matter

In plants which do not have available the unlimited supply of strip material which the Elrod affords, it is the practice, after printing, to remove blanking-out material from the type pages of booklets, catalogues or broadsides, so as not to exhaust the composing room's supply of such essential material. It costs time and money to remove blanking material from forms, and more time and money to replace it when the pages are again brought out for printing.

Plants with an Elrod on the floor leave pages held for reprint in the shape in which they come off the press, without removing spacing material or furniture, so that these pages can be locked up again when needed without a moment's delay or any unnecessary work.

Quality of Product

The Elrod produces strip material economically, but, more important still, it delivers product of high quality. The uniform metal density of Elrod-cast rules makes them particularly satisfactory for cutting with mitering machines, composing room saws and other such cutting tools.

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Elrod-cast leads, slugs and base, being formed of continuous solid metal, are free from air holes and from brittle breaks or welds.

Uniformity

Elrod-cast strip material is uniform in thickness and height—from month to month and year to year, Elrod molds being manufactured as complete non-adjustable units. With ordinary use, wear so slightly affects the strip-forming dimensions as to be practically negligible when proper care in operation is observed.

Standard Metal

For producing Elrod-cast rules and leads, it is important that only metal in first-class condition be used. However, satisfactory production of Elrod-cast slug and base material is quite commonly obtained by feeding linotype metal, dead type slugs, spacing material and base directly into the crucible without their first being re-melted and formed into pigs.

Therefore, when Elrod-cast strip material is used for spacing material and for base, this need not be picked out of the form before dumping. The entire linotype-metal form can be pushed off the stone into the hell box and then converted into new Elrod-cast slugs and base.

Base That Stands Up

Important metropolitan newspapers have thoroughly tested 36-point Elrod-cast base under the most severe pressures incident to dry mat molding, and have found that it stands up better than any other type-metal base. It has thus proved to be the ideal mounting for halftones and shell-cast stereos in newspaper forms.

Leads and Slugs

As produced on the Elrod, leads and slugs are smooth and uniform and exceedingly comfortable for compositors to handle. Recent improvements have made quite practical the very difficult job of producing 1-point leads. The convenient 12-point tie-up slug strip has a channel on one side for the string used in tying up pages, permitting them to be locked up for printing with the string still in place.

Base and Furniture

Elrod strip material 12 points and upward in thickness can be cast with hollowed body, in order to reduce the poundage of the metal consumed. Such strip is still amply strong to stand up under press or stereotyping pressure, as has been demonstrated in actual experience.

An important use of strip material in the larger point sizes is for base under halftones, line cuts, or shell casts in newspaper and publication offices. In the spacing material height, such thicker strips prove exceedingly valuable for blanking out pages.

Another important use for 36-point spacing material is on the imposing stone, to serve as furniture in imposing and locking up forms. In long lengths, these strong and solid strips can be run straight across a form, providing an almost fool-proof line-up for heads of pages.

Electric or Gas Heating

Model F and Improved Model E Elrod machines are available arranged for using either electricity or gas for heating the crucible and throat. Operation has been considerably facilitated by recent further improvement of the automatic thermostatic control of the electrically-heated crucible and of the burners and controls of the gas-heated crucible.

Cost of Upkeep

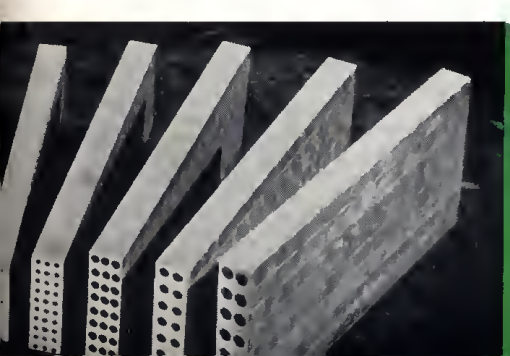
Simplicity of design, sound engineering, quality materials and precision manufacture make the Elrod a machine which, with reasonable care, will run for years with low maintenance cost.

Elrod a Profitable Investment

At a surprisingly low daily or weekly cost, a printer or publisher can own the newest model Elrods, and be in position to produce just as much strip material as his composing room requires for the many uses to which leads, slugs, rules, base and furniture are put.

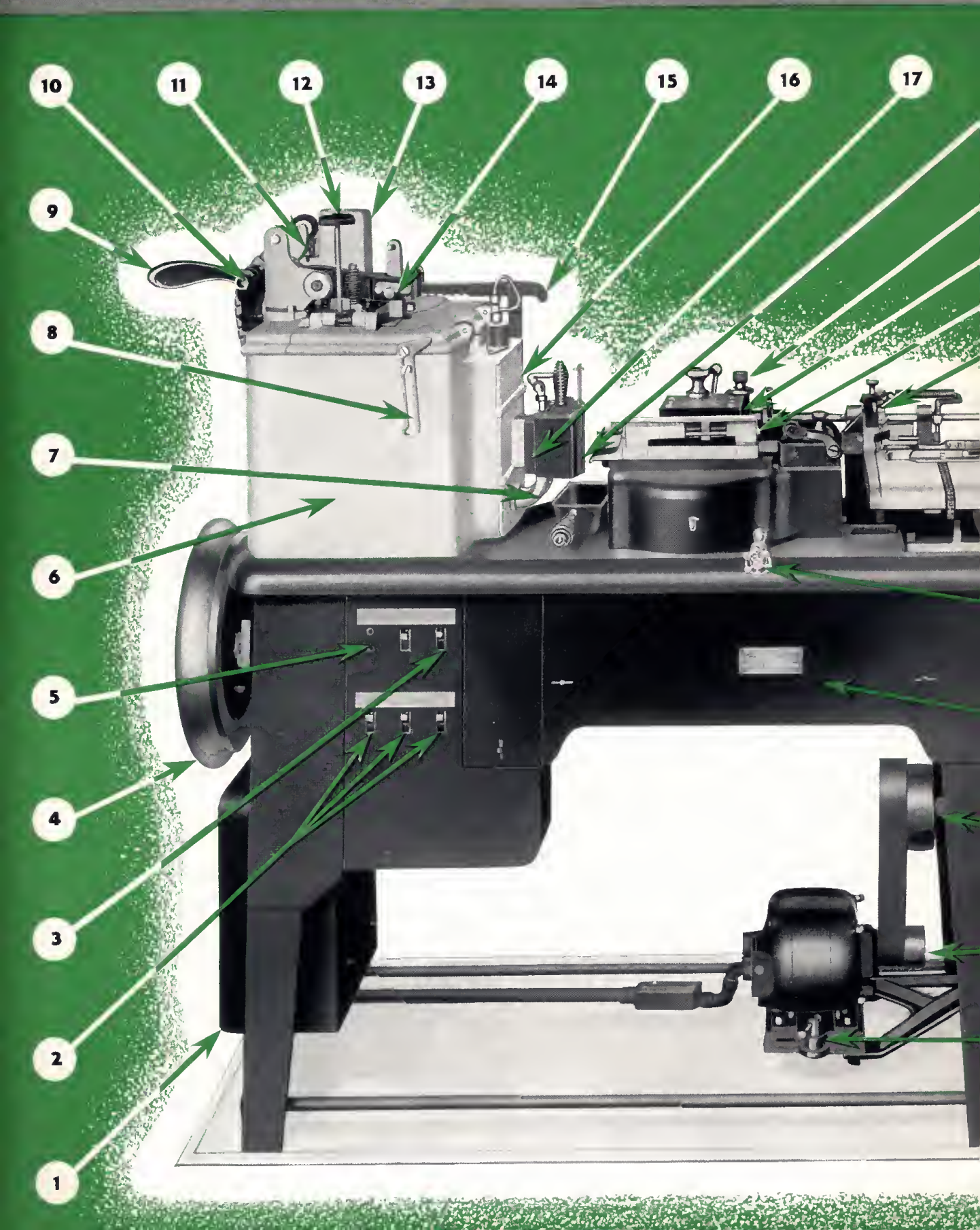
The Elrod, with its wide range of product, is low in first cost and, better still, it is operated at low cost, which is the important factor over a period of years.

Specifications of an Elrod equipment suited to your particular requirements, with specimens of Elrod-cast strip material, will cheerfully be sent upon request.



Advantages of the ELROD to the composing room

The Economy and E



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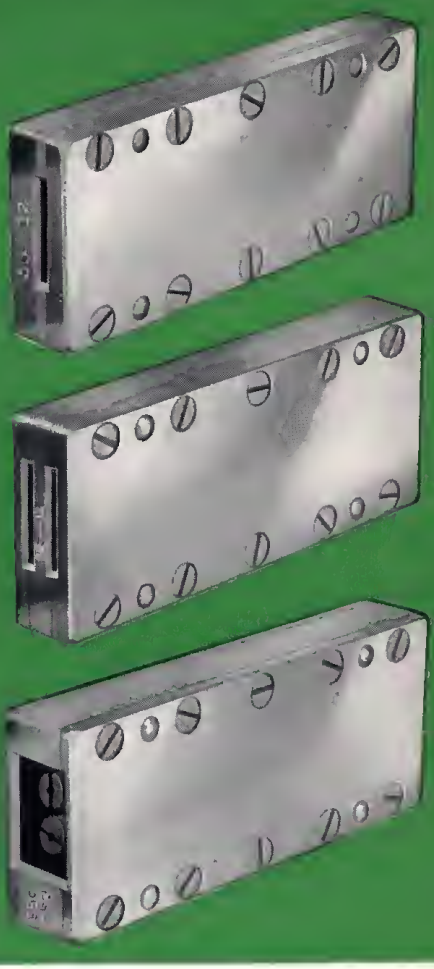
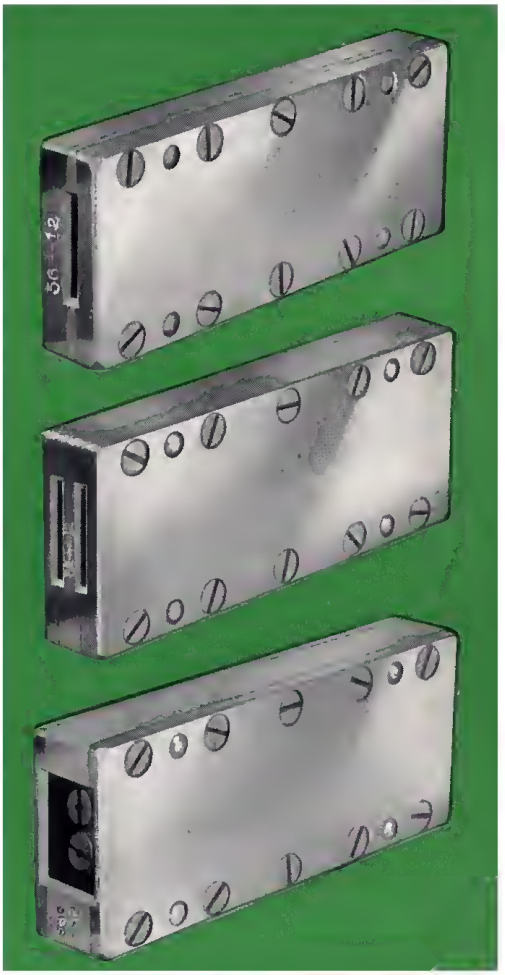
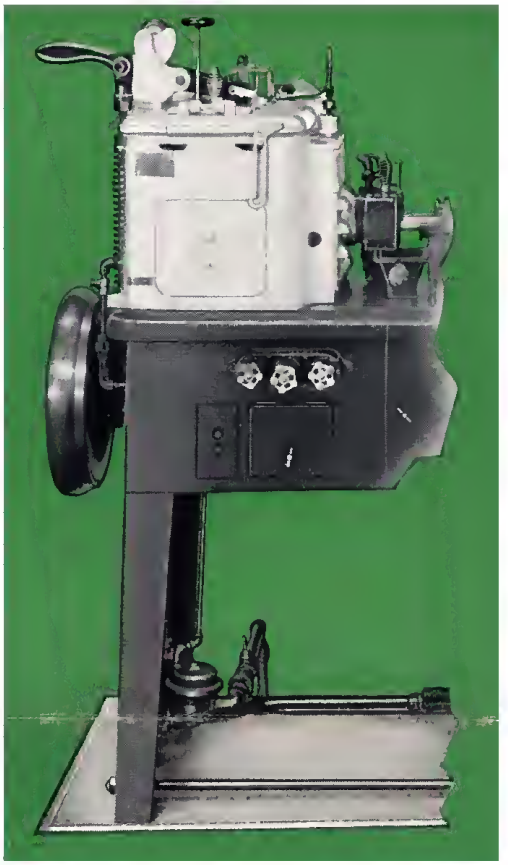


Elrod Molds. Upper mold shown above casts 6-point slugs. Middle mold casts 2-point leads, two strips at once. Lower mold casts hollowed-body 36-point base.





Mechanical Features

1. **Panel Box** of the electrically-heated model automatically controls the current through the crucible units.

2. **Throat Heater Switches** may be set at "high," "medium" or "low" to regulate the heat in the throat according to the requirements for producing the various point sizes of material.

3. **Sealing Heater Switch** used in sealing and unsealing mold.

4. **Combination Balance Wheel and Hand Wheel** for Model F machines effects smoother running of the machine when producing and cutting off 24- and 36-point material. This hand wheel also facilitates turning the machine over by hand for cleaning, oiling, etc. The Model E machine is equipped with a smaller hand wheel for this purpose.

5. **Motor Switch**

6. **Electrically-heated Crucible** is thoroughly insulated to insure uniform and economical heating.

7. **Electrical Connections** leading to sealing heater units are incased in rigid conduits for protection.

8. **Cover Catch** holds hinged portion of th while feeding or drossing metal.

9. **Plunger Lever Handle** facilitates th Pulling upward on this handle, with plunge forces plunger toward bottom of the well,

10. **Plunger Clevis Pin** is easily removabl travel beyond the bottom of its regular stro of metal.

11. **Plunger Gag** renders plunger inoperativ operations with the larger sizes of materia

12. **Mold Sealing Valve** facilitates positi ing of the mold.

13. **Thermostat** automatically maintains th metal in the crucible.

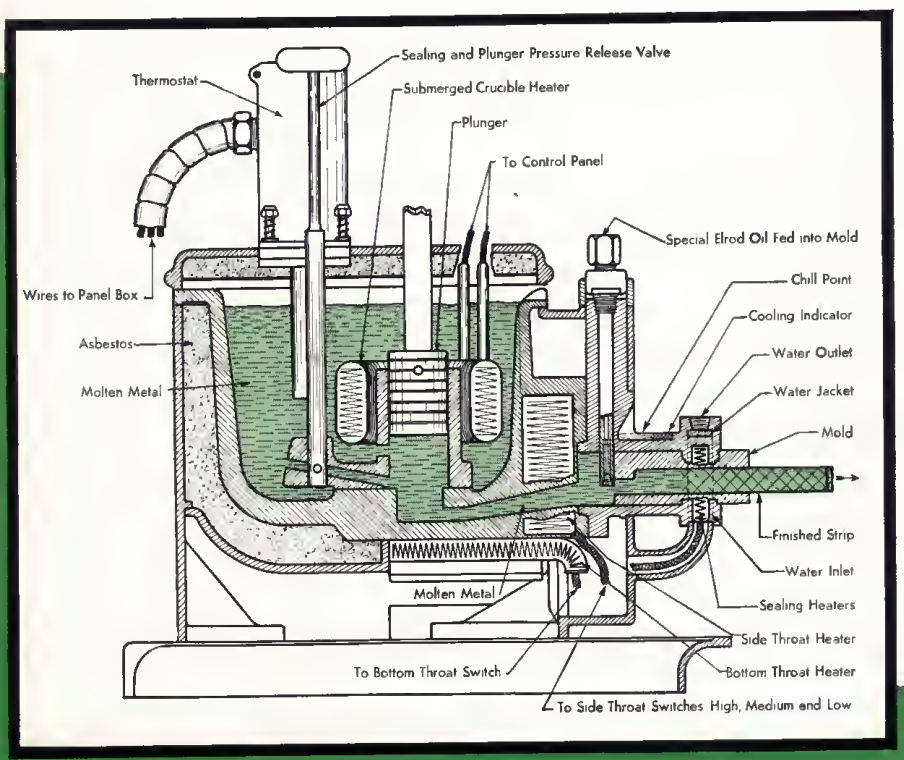
14. **Safety Shear Pin** of soft steel which between plunger lever ing rod, shears off if p structed, thus protectin serious damage.

15. **Pressure Mold Oil** lubrication required fo tion of material.

16. **Extended Mold H** of longer diffusion tube the regularity of oil flo

17. **Water-Jacket Ca** tain uniform distribution mounted to facilitate cl units are located within for easy removal.

18. **Recessed Mold C** proper sealing of the m



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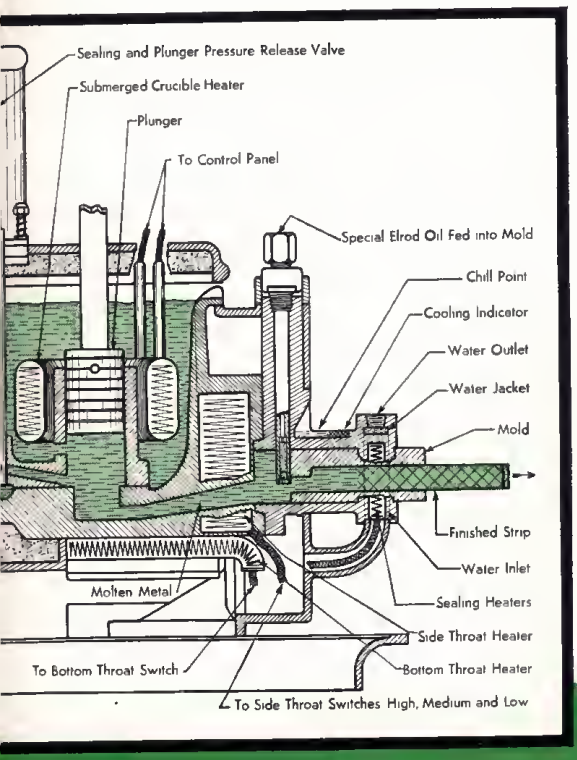

8. **Cover Catch** holds hinged portion of the crucible cover open while feeding or drossing metal.

9. **Plunger Lever Handle** facilitates the starting of material. Pulling upward on this handle, with plunger clevis pin removed, forces plunger toward bottom of the well, cutting off metal flow.

10. **Plunger Clevis Pin** is easily removable to permit plunger to travel beyond the bottom of its regular stroke and cut off the flow of metal.

11. **Plunger Gag** renders plunger inoperative, to facilitate starting operations with the larger sizes of material.

12. **Mold Sealing Valve** facilitates positive and accurate sealing of the mold.

13. **Thermostat** automatically maintains the temperature of the metal in the crucible.

14. **Safety Shear Pin** of soft steel which forms the connection between plunger lever and plunger connecting rod, shears off if plunger should be obstructed, thus protecting the machine against serious damage.

15. **Pressure Mold Oiler** provides the mold lubrication required for satisfactory production of material.

16. **Extended Mold Housing** permits use of longer diffusion tube, which contributes to the regularity of oil flow.

17. **Water-Jacket Caps,** enlarged to maintain uniform distribution of cooling, and side-mounted to facilitate cleaning. Mold sealing units are located within the water-jacket caps for easy removal.

18. **Recessed Mold Chamber** facilitates proper sealing of the mold.

19. **Intermitter**
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20. **Pulling Me**
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21. **Gauge Bloc**
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22. **Cutting Me**
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25. **Water Cool**
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27. **Counter-Sh**

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29. **Mold Stora**
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19. **Intermittent Stroke Mechanism** in model F machines provides for increasing the cooling time in the mold required for the thicker materials—from 24-point to 36-point (inclusive).

20. **Pulling Mechanism** is gear-driven and easily adjustable for sizes from 1-pt. to 36-pt. (inclusive) on Model F machines, and from 1-pt. to 18-pt. (inclusive) on Model E machines.

21. **Gauge Block Lock** holds gauge blocks in place while machine is running.

22. **Cutting Mechanism** is easily adjustable for the various sizes of material.

23. **Cut-Off Gauge Dial** can be set easily to cut off material to any desired length from 5 to 140 picas.

24. **Stacking Mechanism** automatically stacks material on table as it is cut off.

25. **Water Cooling System.** Water supply and drain are controlled by one two-way valve at front of machine.

26. **Front Plate** is hinged to make main shaft and cams easily accessible for cleaning and oiling.

27. **Counter-Shaft and Pulleys**

28. **Adjustable Motor Table** maintains belt tension and makes changes of speed convenient.

29. **Mold Storage Box** provides storage in oil for molds not in use.

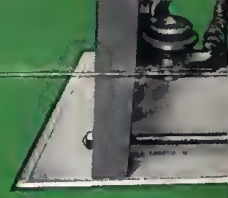
SPECIFICATIONS

Dimensions. Length: 5 feet, 11¼ inches. Width: 18¾ inches. Height (with thermostat cover up): 4 feet, 4¼ inches.

Current Consumption. Average on electrically-heated models is 2 KWH per running hour. The gas-heated machine requires an average of 28 cubic feet of gas per hour.

Weight. Assembled and ready to operate, Model F electric weighs 950 pounds, and the Model E electric weighs 890 pounds.

Electric Current. Standard electrical equipment for 110 and 220 volts, direct or alternating current.



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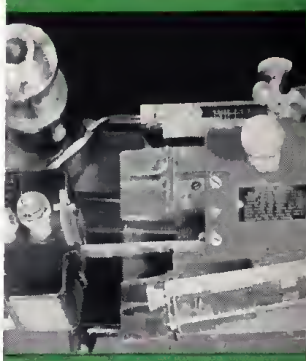

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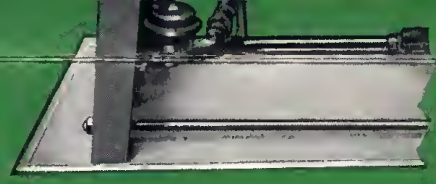
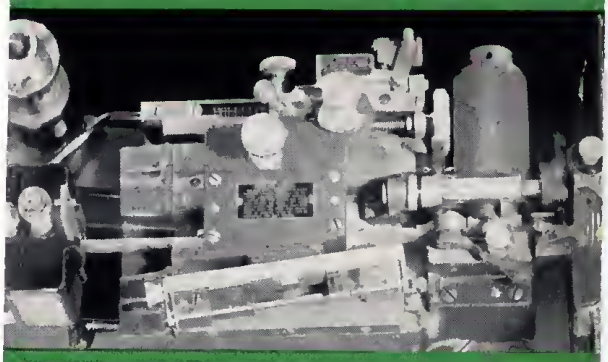
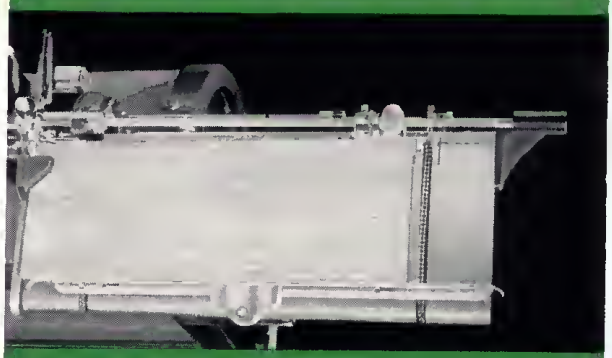


Gas Crucible. Increased heating capacity of the main burner under the crucible reduces the heating-out time and permits the maintenance of more even temperature of metal in the crucible—which is controlled by an automatic thermostat and a gas pressure regulator. For convenience in cleaning the crucible burner, a covered opening in the side of the crucible is provided. The double throat-burner increases heating efficiency and helps to maintain even heat distribution over both sides of the throat.

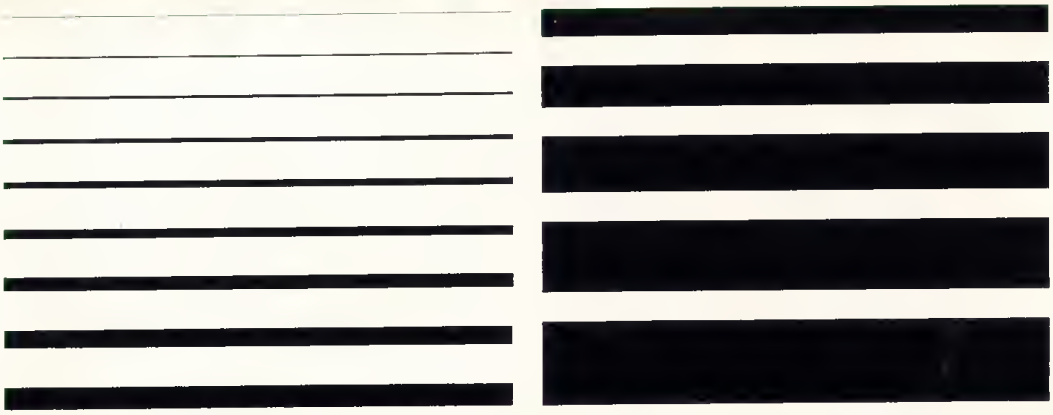


Pulling Mechanism. Strip of various thicknesses is clamped and pulled from the mold by this mechanism. The adjustments for stroke length and strip thickness are set here.



Delivery Table. Strip material, cut off to the desired length by the cutter at the upper left, is automatically stacked on this roomy delivery table, as it is produced.

Some Standard Elrod Rule Faces



Some Standard Elrod Combination Rule Faces

73-31	One and one-half point with Half-Point	3-pt.
74-04	Cut-off Rule	4-pt.
76-46	Double Hairline centerface	6-pt.
76-11	Double Hairline (on side)	6-pt.
78-47	Double Half-point centerface (1½ Pt. white space)	8-pt.
78-54	Double Half-point centerface (2 Pt. white space)	8-pt.
76-30	Double Half-point (on side)	6-pt.
76-19	Double One-point (on side)	6 pt.
76-28	Double One-point (on side)	6-pt.
76-13	Double One-point	6-pt.
76-31	One and one-half point with Half-Point (on side)	6-pt.
78-32	Two-point with Half-Point (on side)	6-pt.
76-33	Two-point with One-Point (on side)	6-pt.
76-10	Double Two-point	6-pt.
76-12	Tariff Rule	6-pt.

76-29	Three-point with One-point	6-pt.
76-27	Triple One-point	6-pt.
78-34	Four-point with Half-point	6-pt.
76-35	Two and one-half point with two Half-point	6-pt.
76-36	One-point with two Half-point	6-pt.
76-37	Two-point with two Half-point	6-pt.
76-14	Two-point with triple Hairline	6-pt.
78-38	Four-point with two One-point	8-pt.
79-17	Six-point with two One-point	12-pt.
79-18	Six-point with two Two-Point	12-pt.
79-40	Three Half-point	12-pt.
79-41	Six Half-point	12-pt.
79-42	Two Two-point with four Half-point	12-pt.

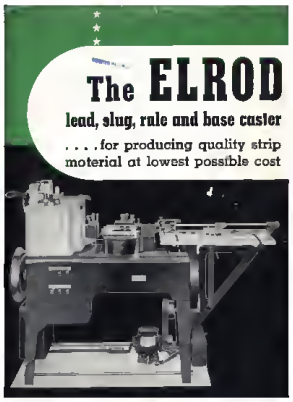
Below are shown cross sections of the bodies on which Elrod strip material is cast. Leads, slugs, and base on these bodies are available from stock in four heights: .750, .765, .854 and .875.

Twin 1-Point Leads | Twin 2-Point Leads | Twin 3-Point Leads | 6-Point Slug | Single-channel Tie-up | Hollow-Center Body 12-Point Slug | Hollowed-Body 15-Point Base | Hollowed-Body 24-Point Base | Hollowed-Body 30-Point Base | Hollowed-Body 36-Point Base

LUDLOW TYPOGRAPH COMPANY

2032 Clybourn Avenue + + + Chicago, Illinois

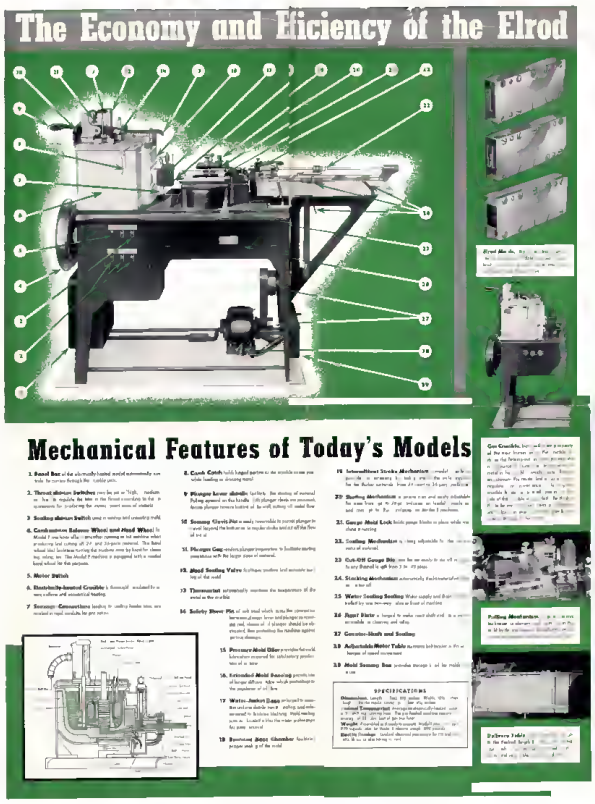
"French Fold" Page Sequence



1. Front Cover

2. Open like a book

(back cover)



3. Fold down to make a "poster"

4. Turned over, the back looks like this