After correction, the matrix is ejected from the forming die ready for removal of any burrs which may have occurred during reshaping.

A vise accommodating many matrices simultaneously, is used to hold the matrices in position for removal of burrs. Special hardened blocks, shaped like matrices, are placed between groups of the matrices which have been repaired. They act as guides to keep the size and relationship between lugs intact while burrs, if any, are removed.

A smaller vise, which accommodates one matrix at a time, is used for reshaping teeth and for any other use which might occur to the machinist; a tiny oval shaped anvil supports the combinations for straightening operations on the teeth.

POSITIVE CHECK FOR ACCURACY

A matrix which passes the check points provided in the tool is true in all its dimensions, and will cause no more trouble in its circulation in the linecasting machine. In fact it is possible to catch defects even in new matrices before trouble occurs on the machine which is sometimes difficult to trace. For instance, an oversize dimension between the reference and the casting sides of the matrix caused by a burr in processing at the factory or even in use will prevent the matrix from going into the forming die and thus catch trouble before it goes any further. This is one of the most critical measurements of the matrix.

Your investment in the STAR Matrix Repair Tool is quickly returned by a reduction in the cost of replacing damaged matrices and by an increase in machine output.

STAR PARTS, Inc.

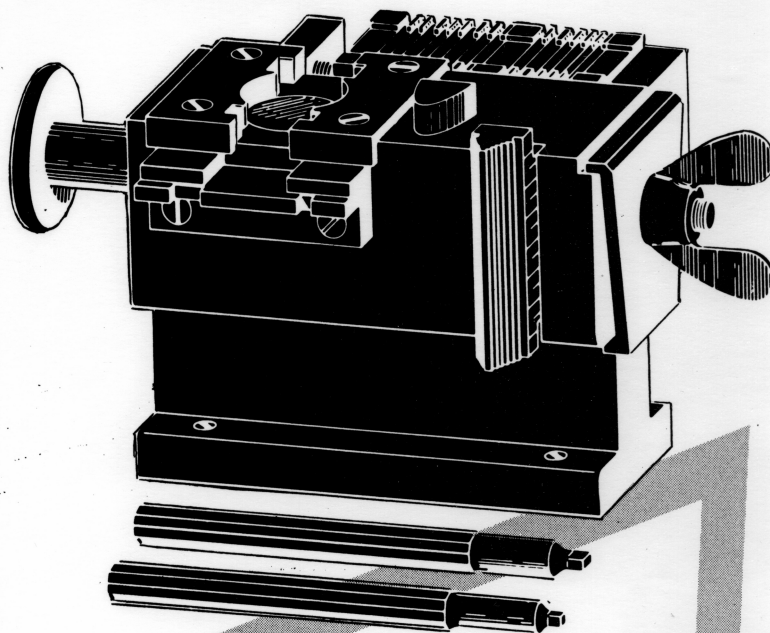★ *Precision* TRADE ★ MARK *Parts* ★

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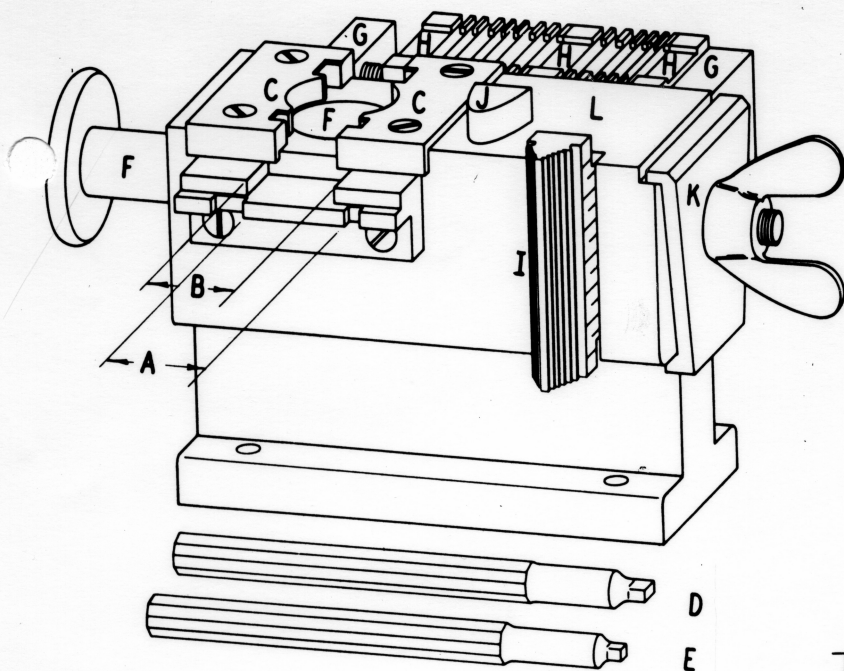
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④

the STAR Matrix Repair Tool...

A precision tool for easy matrix repair. So simple to handle, the apprentice becomes an expert.

★ Saves a large percentage of matrices from the scrap heap.

★ Cuts machine downtime caused by faulty matrices.

★ Restores alignment.

Part No. Z-77-S Complete

①

INCREASE PRODUCTION

Fonts with bent or worn matrices are trouble-makers on a linecasting machine. Stoppages caused by damaged matrices reduce production and require extra maintenance time. Worn toes cause misalignment (wavy lines), resulting in reset copy. The high cost of matrices today is a known factor which needs no amplification.
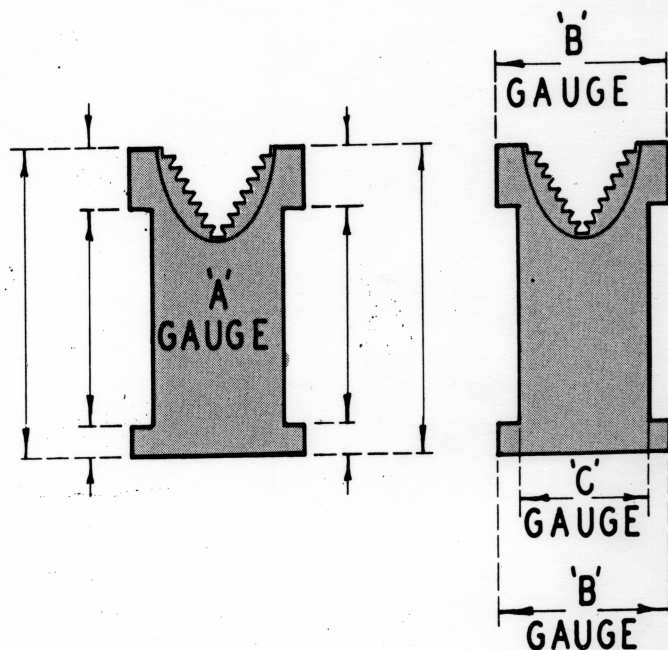
ANYONE CAN USE IT

The repair of these matrices is a necessary job, and, by old fashioned methods, a time-consuming one. Now, with the STAR MATRIX REPAIR TOOL, an apprentice can be put to work, saving, in some plants, hundreds of dollars yearly.

SAVE MATRICES

The new STAR MATRIX REPAIR TOOL makes this work easier and faster because automatic controls are provided. Many matrices previously thrown in the "hell-box" can now be salvaged and put back into use. On the other hand, matrices which are beyond repair are quickly detected and discarded.

HOW IT WORKS

Use of the tool is simple and fool-proof. Gauges immediately indicate the condition of each mat-

rix. The first one checks the tooth combinations on a graduated bar which shows if it is still usable; the second shows wear on toes and ears. Bent teeth can be straightened on a special anvil. This inspection and repair of combinations will correct many matrices which cause pile-ups in the channel entrance as well as distributor stops, and will restore the all important alignment. This is the procedure:

The tooth combinations of the matrix and the lugs are checked on the precision gauges to show whether repair is necessary. If the combinations are shown to be too far gone for further use, the matrix is immediately discarded so that no further time is wasted on repairing it. If the lugs are worn the matrix is placed in the reshaping section of the tool, and flat-headed punches swage the lugs back to perfect size and relationship to each other.

The design of the tool makes this result automatic, for it is impossible to swage a matrix to oversize dimensions in the die holding the matrix.