

pleted and ready for use. In applying it, insert the turned-down end between the chase and side or footstick, about an inch or so from the quoin you wish to move, pull the handle in the opposite direction from which the quoin is to be driven, at the same time placing the thumb of the left (or free) hand against the quoin, and, as the "wrench" opens the space between the chase and foot or sidestick, shove it up tight, repeating the operation until you have your form square and tight. Then by a judicious and careful use of the mallet and shooting-stick your quoins can be tapped up sufficiently to make the form lift without fear of displacing the mitred corners. In locking-up newspaper forms it is exceedingly handy, the use of it expediting the operation considerably. No office need be without it, so far as the cost is concerned, as it can be made for fifteen or twenty cents. Any blacksmith can make it, but no "blacksmith" can use it properly.

#### Imposing Stones.

The materials of which imposing stones are composed are almost as varied as the mode of fitting them up for use in the composing room. Of all the kinds ever used, or in use at the present time, few seem to come anything like near the mark in the way of utility and economy. An imposing stone should have an even, true and perfectly smooth surface, with not the least particle of grit about it. There is no economy in buying a cheap stone, if it is soft; and a hard one cannot be had without paying a good price.

During an experience of over twenty-five years we have worked on nearly all kinds of imposing stones, including wood, free and sandstones, "American" and Italian marbles, iron and red granite. The only thing that can be said in favor of the free and sandstones and all the soft marbles, is, that they are a perfect bonanza for the type-founder, while, of course, for the printer using them they are a constant source of loss. It will not take many months' use of such imposing surfaces to *grind* the feet off the type, leaving them not a leg to stand on, to say nothing of the labor expended and time lost in bringing up low type. Besides, the work turned out will very often not bear a close inspection by a practical eye.

Of all the materials used, the three latter — Italian marble, iron and granite — are the most economical, and come nearest serving the purpose for which they are designed. Genuine

Italian marble, well and properly finished, with a good polish, makes a very serviceable stone, providing great care is exercised in locking-up, lifting and laying down forms. Iron imposing surfaces are very good, but they are very seldom smooth enough and require a great deal of care and labor to keep them free from rust. A wet form laid on one of them over night — without it is previously well oiled — will be found quite rusty in the morning. In newspaper offices, a form just from the sink, laid on an iron imposing surface and allowed to stay there until the type is distributed therefrom, will be found completely fastened to the surface by rust after twenty-four hours. The same objection hardly holds good in book and job offices, as the forms are generally small and light, and are usually quickly cleared off.

Red granite is something new, we think, for imposing surfaces. At least, we never heard of this material being used previous to 1875, at which time an imposing stone of this material was put into the composing room of a daily newspaper in this city, and was undergoing trial — satisfactory as far as it went — at the time of the great fire — 1877. The office containing this stone was destroyed at that time, and, of course, the experiment was brought to an abrupt termination for the time being. However, immediately after the fire, two more were ordered, which were in due time put into the same establishment, and are at present under trial. They have a smooth glassy or flinty surface, and it is a real pleasure to make-up on them. There are a few small holes in them, which would seem to be the result of the surface not having been rubbed down sufficiently after the "stunning" process. In the manufacture of these stones, as we understand it, the surface of the rough stone, as it comes from the quarry, is pounded with a sharp, heavy, iron or steel, wedge-shaped hammer. This is the process called "stunning," and the action of the hammer fractures the crystals for some depth. Was this fractured surface all taken off in the dressing, we believe a perfect and sound surface would be arrived at, and the small holes referred to above would not occur. The ordinary wooden quoin and a steel shooting-stick is used, and we have frequently seen it slip off a wet quoin and strike the stone, but have always failed to find the slightest mark or indentation in the spot where it struck. With the exception above spoken of, the stones are perfect