

The Wooden Quoins vs. Steel.

We have often, at the risk of being dubbed "an old fossil," recommended and advised printers to stick to the good, old-fashioned, wooden quoin. In confirmation of our views, the last issue of *The Caslon Circular* has an article on "Type Metal vs. Steel," which must carry conviction with it. In quoting the article perhaps it might have more weight if we were to mention that *The Caslon Circular* is a quarterly publication issued by the Caslon Foundry, London, England. This foundry stands second to none in the United Kingdom, and an opinion coming from such a quarter should have a great weight. Patent locking apparatuses are not what they are "cracked up" to be: this is the voice of reason and experience. We quote:—

"There can scarcely be a doubt in the mind of any person as to the inevitable result when types and steel are brought into forcible contact. Type *must* give way.

"The ingenuity of engineers has been taxed to invent powerful mechanical appliances for locking newspaper forms, and the result has been that special chases of enormous strength have been fitted with double steel side-stick apparatus, to be acted upon by steel screws, which, in their turn, are forced to their full power by means of the hand lever or wrench. This terrific force is wielded by the compositor without thinking of the magnitude of the combined mechanical power of wedge, screw, and lever, and, influenced by his natural nervousness lest the page should drop out in lifting, he wrenches round the screw to the full extent of his strength, until he can move it no more. A pressure of some tons is thus brought to bear on the unfortunate type, which, though cast as solidly as possible, of metal composed of the hardest and toughest combination known to type-founders, and mixed on the most approved principles by steam power, succumbs and gives way to the inexorable steel!

"But this is not all. Where stereotype plates have to be prepared for machinery, the form is passed on the stereotyper's hot bed and heated up to boiling point when steam is used—and sometimes to a higher temperature still where steam is not available. Here expansion necessarily takes place; and as steel does not expand in the same ratio as type, the devoted type, crushed already beyond endurance, *must* go

somewhere, and finds vent in elongation. Alas! the type is, in our opinion, ruined—after being subjected to such usage it is no longer correct, either in body or height.

"A remarkable instance of the dire results of severe locking has lately come under our notice. A daily newspaper was supplied with founts, in the manufacture of which special pains had been taken to produce an amalgam of the toughest and hardest consistency—and with remarkable success. Within a few weeks our attention was called to certain appearances in the types which led to close inspection and consultation. The matter was approached by founder, compositor, stereotyper, and engineer, with a sincere desire to ascertain the cause of the serious phenomena, and the evidence led conclusively to but one result—viz., unnecessary pressure in locking. The tremendous force exerted on the columns had been such that the back of some of the types bore, in clearly defined ridges, the marks of the nick on the type against which it stood. In fact, the metal was crushed into the space formed by the nick, and the feet of other types bore like impressions of the bevel of a lead or rule they stood next to. The body of the type was also found to be smaller, when tested by gauge, and, worse than all, they had become longer, or, to use a founder's expression, higher to paper, by as much as a twelve-to-pica lead!

"There is no remedy for this evil after the mischief is once done; but there is a valuable practical lesson to be learnt which all overseers of newspaper offices would do well to enforce. Let the forms be locked with only a moderate force, sufficient to secure safe lifting. . . . We strongly advocate loosening the forms as soon as they are placed on the hot stereotyping bed, so as to allow for expansion. Where possible, lifting the forms at all should be dispensed with; they should be imposed and then slid along on a continuous bed or imposing surface right on to the moulding bed, so as to avoid all possibility of accident. With such convenience at command there would be no necessity at all for excessively powerful locking apparatus, and the ordinary wooden quoin and side-stick would be found sufficient. . . . We strongly advocate the insertion of wooden furniture—say about two-line pica reglet—between the iron side-stick and the type; for, in case of undue expansion of the type in the process of moulding for stereotyping, the wood would give way