

dicular line, $B D$, the angle (of incidence) $A B D$, which is equal to the angle (of reflection) $D B C$. In other words, a light placed at A would be reflected from the surface $E B F$ toward C . Making allowances for the imperfect drawing of Fig. 6, it is easy to understand how a paper placed in front of the compositor, and resting upon the upper case, may act as an annoying reflector, throwing

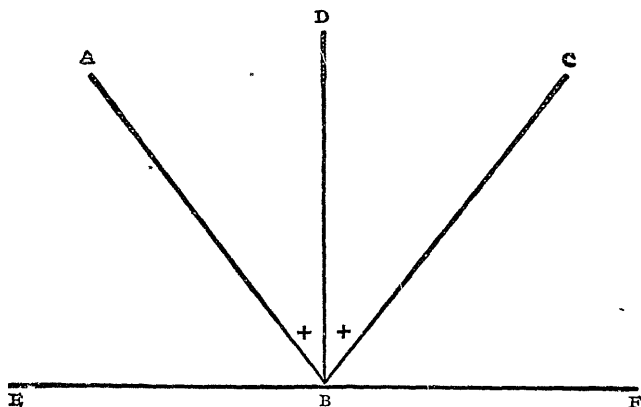


FIG. 5.

the rays directly into his eyes in spite of his eye-shade. But this is not all. The point of reflection on the manuscript or other document often covers or partially covers the particular line of the copy that is being set up, and makes it difficult to see, thus adding to the worker's troubles.

While on this subject of printing I cannot help thinking that the type-setter's eyes are not improved by the necessity for seeing almost instantly the shallow nicks on the side of the type. At any rate it must be very difficult for him to distinguish the first of the series shown in Fig. 7. The second is a little better, but it is a pity that every type cannot have nicks as plainly marked as are indicated in the lower samples. Another visual difficulty is illegible, or rather "dyslegible," copy. This arises not only from "bad" writing, but from the use of pale ink, glazed and colored paper, lead pencil, colored inks, thin paper, and, worst of all, from the employment of a combination of two or more of these.

However, the greatest obstacle the sufferer from ocular troubles has to deal with may reside in his own eyes. Aside from acute or chronic disease of the organ, the worst *form* of weak eyes is *hypermetropia*, or hypermetropia combined with astigmatism. This is a very common kind of ametropia, and the possessor of it sooner or later finds his eyes give out, even when his surroundings are favor-