ious hours, amid the deafening noise of the hammer, to the starting and fostering of the enterprise, may well feel repaid for their unselfish labors.

METAL AS A MEDIUM OF EXPRESSION
BY MARY NORTON

WROUGHT metal brings us to a field of work which offers large opportunities to the craftsman. The medium may seem at first unsympathetic and stubborn, but, on the contrary, it is most responsive to those who understand its nature.

Metal offers a wide choice of temperament from which to select our favorites. For my own part, I much prefer the pure metals to the alloys, as with my somewhat limited experience, one element at a time engages all my energies. Every metal should be allowed to preserve its own individuality, and we should seek to define its leading characteristics, while using it to express our own ideas.

In planning work: for example, an interior decoration, it is well to consider first, what kind of metal can best be employed, with respect to both use and ornament; second, which of several metals is preferable in color and texture in relation to the other furnishings of the room; third, but by no means least in importance, what style of design is best suited to both the use and the metal selected. If iron is chosen as filling all requirements, a design must be made, especially adapted to the qualities of that metal. We can no more make a design suited to iron, and work it out in copper, than we can weave a pattern for gingham into a brocade, and expect
the result to be satisfactory. The characteristics of the two metals are too different to allow similar treatment.

It is quite as impossible for the artist who has never worked in metal to design therefor, as for the workman who has no artistic feeling, to carry out a design. To obtain good results the artist should also be the artisan. It would seem impossible for even the most skilled workman fully to carry out a design which he did not conceive and to which he is not fully sensitive. It is, however, not always practicable for the artist to be his own workman, and there are many parts of the work which can be done almost as well by the workman as by the artist. But after these more or less mechanical parts are accomplished, the artist must finish the work, or must always see in it a great lack which every intelligent observer will also feel, although he ignore the cause. And let me say here that it is to the intelligent observer, as much as to the craftsman, that the "lesser arts" owe their revival and to whom they are looking for appreciation and support. The artist who can find an artistic workman is fortunate; for the training school of the modern artisan is the factory, in which even those who are employed to do hand work must pay more attention to the quantity done in a certain length of time, than to the quality, as long as the latter meets the fixed requirements. This is very apparent in the silver work of to-day, or, at least, it is there brought more closely to our notice. The desire to save time may account, in a measure, for the great number of tools used by silversmiths in chasing; which number is so great as to reduce the work almost to the function of the die, and the workman to the machine.

Technique, in this respect, is not the skilful use of many tools, but ingenuity in the use of few.

For example, if in making a line we use a curved tool, all such lines in our work will
bear exactly the same expression; whereas, when lining is necessary, if we use a straight tool,—sometimes bringing it up to the very end in making a quick curve,—the effect produced will be much fresher and more spontaneous.

In looking at much of the silver-chasing of to-day we find the shape of the tool used more apparent than the feeling which the designer wished to convey; and here again, the disadvantage of separating the designer from the worker is brought to our notice. In this kind of work, it seems both easy and natural that they should be one.

So much is said just now of the "marks of the tool," that we are led to regard the desire for them as a fad, rather than as a real appreciation. Tool marks in themselves are of no value, if they do not aid to interpret the thought; properly used, their function is not so much to leave their own mark or impression, as to change the whole appearance and quality of the metal.

This is not so apparent possibly in chasing, though too much can scarcely be said against the constant use of the outlining tool. If the whole design is outlined, before being raised, freshness and feeling are almost impossible in the finished work. A continuous line of any account would naturally be bad, but it is made worse by the inevitable spreading which takes place when the design is raised. Very little outlining is really necessary before or after the design is raised, and it is most interesting to note the delightful effects which can be obtained in place of outlining, by a broad flat tool, commonly called the planisher, which is one of the best modeling tools.

In making a spoon, it would seem that nothing is gained by hammering it into shape by hand, if through the employment of such a variety of mechanical devices all life and feeling are lost. One or two hammers, an anvil and a round steel head for shaping the
bowl are quite sufficient to produce a variety of shapes. As the shaping is done when the metal is cold, it requires a greater length of time and more hammering to obtain a desired form than when hot metal is used. Consequently greater refinement is secured.

It is necessary in executing wrought silver to anneal it several times; by this process, the article is brought to a rose-heat and the substance contained in all silver of use to make it sufficiently hard, is burned away on the surface, leaving a coating of absolutely pure silver which is beautiful in color and texture. I see no reason why this should ever be destroyed. In the commercial article, it is always burned away in a bath of acid; as the pure silver is not sufficiently hard to take the polish usually applied, or the oxide, if the latter is desired. Neither polish nor oxide can compare in beauty to the surface left by the annealing, which possesses unmarred all the most delicate impressions given by the workman.

Metal has so long presented to the world the expressionless face of the die that its varied possibilities have been almost forgotten. It is now calling to be redeemed by the forge and the anvil, and those who shall take up this kind of work with the purpose of doing all in their power for the metal as well as for themselves, will be fully repaid for their labor.