

young pupil. It is, I take it, by a girl, though your article says a boy. But is there much real value in the exercise even when such clearness is attained?

I make it a conscientious matter from the first to answer all child questions about nature in a truthful manner. They are never put off with false theories involving supernatural or other agencies. For instance, what child fails by three to five years of age to ask how do the stars stay up there? How easy to put him off with some farcical or miraculous supposition. On the contrary, the simplest possible attempt should be made to give him the real explanation. Will he understand it? If not entirely, he will be on the right road. There will not be something to undo by and by. Why can he not understand attraction as well as you or I? Only he must have it explained by what he is familiar with.

We are getting on the right track. Science furnishes studies infused with romance. No novel has the fascination for young people of a well-told geology or biology.

E. P. POWELL.

The care of pamphlets.

Every scientific library, public or private, contains pamphlets by the thousand, and nothing is more necessary for the accommodation of those who use it than some available system of binding which shall preserve from destruction and at the same time be accessory to a convenient system of classification.

Some system of permanent individual bindings is needed which shall afford 1°. permanent protection; 2°. the possibility of a perfect classification, and the intercalation of new material from day to day; 3°. opportunity for perfect labelling and cataloguing; 4°. the greatest convenience to the reader. The best endowed public libraries can perhaps afford to pay a bookbinder to put separate covers on pamphlets, and it is the practice of many of them thus to care for the most important. The cost is, however, very considerable. What the private individual needs is a binding-case much more inexpensive—one in which he can himself insert his pamphlets. Feeling sure that it was possible to meet this need, I undertook an investigation. The bookbinders, with their skilled workmen and their expensive binder's board, did not seem to be in a position to supply this demand. I found upon inquiry that the simplest form of binding-case cost from twelve to fifteen cents. I next turned to the paper-box manufacturers, who employ unskilled laborers, and who use less expensive materials. I found that binders for octavo pamphlets, when ordered in considerable quantities, could be made for \$4.50 a hundred, and quarto binders for \$7.50 a hundred. These binders are made with sides of thick paper-pulp board, which is not likely to warp, and with backs of binder's muslin, and are covered with binder's paper. They have muslin stubs, upon which the pamphlets may be glued, and may be made of varying thickness. The most useful sizes will doubtless be one-eighth, one-quarter, one-half, three-quarters and one inch. The sizes I use are, octavo, 6 3/4x10 inches; quarto, 10x12 inches. The octavo covers are made larger than the ordinary octavo page, to include papers in imperial octavo; duodecimo pamphlets may also be put in these covers, for the sake of uniformity, and convenience in classification. Each binder has a blank label on one of its upper corners, upon which the name of its contents are written. I arrange these in paper

boxes, upon ordinary book shelves, so placed that the contents of each box may be handled in the same manner as the cards in a card catalogue, the position of the title labels facilitating this operation. A system of deep drawers would be equally convenient.

I also use these pamphlet-cases for filing letters, photographs, newspaper clippings and other literary material. A stout manilla envelope being glued to the stub with its opening to the right, and next to the back, is covered and protected by the sides of the binder, and may be filled with loose papers, their character being indicated upon the label outside. The binder may then be arranged with the pamphlets or elsewhere. Classified scrap-books may very easily be made by fastening a few sheets of book paper to the stubs, and bundles of letters may be bound in in a similar manner. I have for years used binding-covers of a still cheaper and simpler form, which are simply sheets, 9 1/2x13, made of the stout, thick paper used in herbaria for genus covers. These are fastened to the pamphlets by the use of the patent staple-like paper fasteners, sold by stationers. They are labelled and arranged in the same manner as the binders, as described above, and serve an excellent purpose, the paper, though less indestructible than is desirable, being very stiff and durable. It is simply waste of time to use even the thickest of ordinary manilla paper for this purpose.

This note is sent in the hope that it may draw forth descriptions of other methods of caring for pamphlets.

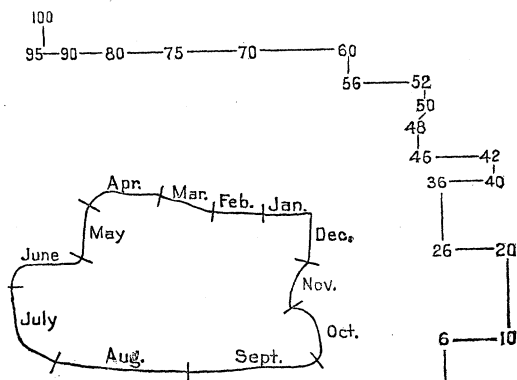
G. BROWN GOODE.

U. S. national museum, Washington.

Color and other associations.

In *Science* for the 18th of September, I was much interested in the letters on 'color and other associations,' for I have always experienced similar illusions. According to my fancy, the months have always appeared as below.

The days of the week are in the form of a circle, Sunday on top, Thursday below; the days rotating from right to left. Sunday appears yellow, Monday pale straw, Tuesday green, Wednesday yellow, Thursday orange, Friday black, and Saturday whitish gray. The numbers arrange themselves as follows:



When I think of a number I always place it in the diagram. Above 100, the numbers go between the hundreds like the diagram, and the hundreds themselves follow a similar course.