

letters. To the beginner on the violin the sounds scraped forth are most wearisome in their monotony; but patience and perseverance train the ear to distinction of tone and the hand to delicacy of execution, and the much-abused, but ambitious youth may turn out a Paganini. To the average man the shades of the different colors are all alike; but to the practised eye of the æsthetic woman each shade has its individuality. And so might examples be multiplied *ad infinitum* in every field of sense, but especially in objects of sight.

The same results have been developed in another manner, new to most of us, but so interesting as to be worth noticing. If a photographer were to take a negative and receive the impression not of one person, but of all the members of the same family, in quick succession, one exactly over the other, the family characteristics would be obtained, and a picture obtained, not of anyone in particular, but of all in common—it would be a true family likeness. Such pictures have been taken, and are called “composite pictures.” A late number of *Science* contained four cuts of composite pictures, taken in Washington, at the meeting of the National Academy of Sciences. No. 1 is a picture of twelve mathematicians, and presents the face of a typical American mathematician; No. 2 is that of sixteen naturalists; No. 3 that of thirty-one academicians, bearing a strong resemblance to No. 1; and No. 4 is that of twenty-six field-geologists. One of the pictures is said to bear a strong resemblance to a scientist who has been dead for some years, and another is an exact picture of a member of a notable mathematical family.

The art is yet in its infancy, but is being developed. It will be of great service in presenting typical representations to students in many departments of science, and it may be the means of revealing likenesses in objects hitherto unnoticed. A strange feeling must come over one as he sees before him a picture, not only of himself, but also of his brothers, sisters, father, and mother, and possibly a striking peculiarity recalling some of the family heirlooms, antique sketches of one's ancestors. When