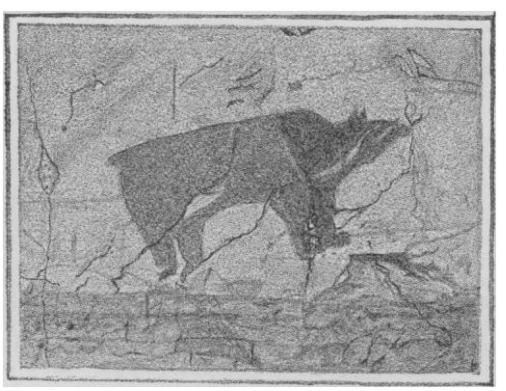
guesses as the 'Golden City,' Colorado, to which you called attention some time ago.

J. KING GOODRICH.

Smithson. inst., Washington, Jan. 13.

Cliff-picture in Colorado.

The accompanying print is from a photograph of a remarkable formation which may be deemed worthy of mention. The original photographic print was sent to the military academy, about twelve years ago, by Capt. (then Lieut.) George S. Anderson, sixth U. S. cavalry. I have lately obtained from Captain Anderson the following statement in regard to the object. His statement is from memory, after the lapse of a dozen years; but it is not probable that there is any material error in it, as he went to considerable trouble to secure the photograph. The natural picture is on the face of the sandstone cliff forming the west bluff of the Purgatoire River, Colorado, twenty miles from its mouth, and twenty-five miles from Fort Lyons. The total height of the cliff at the point is about seventy feet above the bed of the river. The picture is about thirty-five feet above the stream, with twenty-five feet of vertical cliff above it. The talus of the cliff extends up about thirty feet, so that there are about five feet of vertical wall between the picture and the loose rock below.



The extreme length of the picture is at least seven feet. The cliff is composed of brownish-red sandstone: the picture at the surface is of a much darker color, which color gradually passes into the uniform color of the rock, at a distance of 2½" or 3" from surface, as shown by detachable fragments. Copies of the photograph were sent, at the time it was taken, to Prof. Joseph Henry, Professor Dana, and to Darwin. Professor Henry asked, "Can it be any thing else than a work of Indian art?" Professor Dana thought the color due to iron stains, and the outline accidental. Darwin hesitated to express an opinion, but dissented from Professor Dana. Colonel Kendrick, formerly professor at the military academy, expressed the same opinion as did Professor Dana.

The figure is remarkably distinct and well defined for the result of accident; but, if Professor Henry's idea be rejected, there seems no other explanation.

S. E. TILLMAN.

West Point, N.Y.

The English sparrow.

A European ornithological journal recently contained the following testimony in regard to the sparrow (Pyrgita domestica), from the pen of Dr. Schleh, professor of agriculture at the College of agriculture, Herford, Germany. Dr. Schleh has paid a great deal of attention to this matter, and believes the sparrow a pest on the continent, voluminous evidence of which he is said to have brought forward in his small treatise entitled 'Der nutze und schaden des sperlings (P. domesticus) im haushalte der natur.'

By examining the crops of a great number of nestling sparrows sent to him from different parts of the country, he found that young sparrows, while in the nest and for a week after having left it, subsist entirely on insects, grubs, etc. Two weeks after leaving the nest, their food still consists of 43 per cent of animal food; a week later of 31 per cent, and after that age of only 19 per cent, of animal ingredients. But as soon as they become independent of their parents, they prefer seeds, and subsist almost entirely on grain, fruit, and the buds of trees. Dr. Schleh, however, mentions some interesting instances regarding some specimens which seemed to have a peculiar taste for the seeds of weeds which often become a great plague to the agriculturist. In one crop he found the considerable number of 321 whole seeds of Stellaria media (Vill.), in another 43 seeds of Atriplex patulum (L.), in a third 66 seeds of Setaria verticillata. Some individuals also have a special liking for certain insects. Thus he found in one crop 90 specimens of Haltica affinis (Gyll.): four other sparrows had eaten almost nothing else but a certain kind of beetle, Anisoplia fructicola (F.).

ERNEST INGERSOLL.

Equality in ability of the young of the human species.

The review of a recent work on geometry, in *Science*, Jan. 1, is very justly criticised by W. R. in the number for Jan. 8.

Nothing is more fallacious than that ancestors have much to do with natural endowments: environment has much, and pre-natal influences probably most of all, in determining mental qualities. Physical traits are to some extent traceable to ancestry; but the whole history of the race, and of our country in particular, is a refutation of the much studied hereditary genius, or transmitted mental quality.

Even the writer's comparison is unfortunate. Nothing seems more like chance than the development of a race-horse. When the truth is known of our most celebrated mile-in-two-fourteen trotters, they will be found to have been picked up here and there from the peddler's cart or from the farm. Their qualities accidentally discovered, and fictitious pedigrees made up for them, they have never left a racing progeny behind them.

I fully agree with N. E. in saying, "Better assume that the young are born equal in ability, and in their early training . . . give them an equal chance to develop into mechanics, store-keepers, artists, farmers, or lawyers;" but by all means give them a chance to follow the bent of their intellect as soon as they are old enough to differentiate it, as, for instance, in their college courses.

P. J. FARNSWORTH.

Clinton, Io., Jan. 12.