

vireo, phebe bird, song, field, and chipping sparrows. When out riding on Aug. 4 we heard the strain of a meadow lark, and on the 6th the noisy tirade of a white-eyed vireo.

On Aug. 8 the note-book tells of a fine concert, when a goldfinch, an indigo bird, field, song, and chipping sparrow sang, an oriole whistled a few times, and a yellow-throated vireo was tune-ful by spells for a long while.

Aug. 15. Red-eyed vireo, chewink, and field sparrow; 16th, yellow throated vireo, phebe, goldfinch; 17th, oriole, chewink; 18th, red-eyed vireo; 19th, yellow-throated vireo, and "orioles make themselves heard nearly every morning now." Aug. 21, field sparrow, wood pewee, and black and white warbler.

Aug. 29. "The yellow-throated vireo sings nearly every day — almost the only bird we hear nowadays. Yesterday we noticed the songs of a goldfinch and a song-sparrow; chickadees also were musical." This closes the month's record, but it is noted down as something unusual, that the yellow-throated vireo continued to sing during every forenoon for the first six days of September.

There are usually a few fiery days in mid-summer when nearly every bird is silenced, but rarely an August morning passes without a salute to the dawn from sparrow or goldfinch.

#### A RARE FORM OF POLISHED STONE IMPLEMENTS AND THEIR PROBABLE USE.

BY WALTER HOUGH, WASHINGTON, D.C.

AMONG the collections from Mexico, Central and South America, exhibited in the Columbian Historical exposition at Madrid, the writer noticed a number of oblong polished blocks of hard stone of unknown use, averaging  $3\frac{1}{4}$  inches in length,  $2\frac{1}{4}$  inches in width, and  $1\frac{1}{4}$  inches in thickness. The broad surfaces of these stones are plane, bearing a number of grooves parallel to the length, from ridges like those seen on Polynesian tapa mallets.

The edges, as a rule, are hollowed out by pecking, seemingly for convenience in grasping the block, so that the section is that of the modern eraser for the blackboard. Often these blocks are only nicked at the corners, and usually two sides and one end only are hollowed out, which seems to indicate that they were mounted in a handle, perhaps by means of a wythe going around the hollowed edge.

In most cases both sides are ridged, one side coarse and the other much finer; a peculiarity noticed in the Polynesian mallet of square section, which often bears four grades of ridges, which are used successively in reducing the bark to thinner texture.

Only one of the blocks seen is round in outline; a few others have rounded corners; the ridges are parallel and the ridged surfaces perfectly flat. An aberrant block of this type, which is probably a stamp, has a convex surface, with sawed diagonal grooves crossing (hatchwork) at either end bounding a band of horizontal lines enclosing shallow bored pits and a central series of shallow bored circles with cores.

The material is usually hard basalt or porphyritic rock, and the channels bounding the ridges are fine examples of sawed work.

The resemblance of these objects to those used by so many different peoples, in beating out fibrous bark for clothing, paper, etc., is very striking. May it not be said that this is a pre-historic implement for the same purpose, and that they give an insight into the manufacture of the paper upon which the Mexican codices are painted? In Costa Rica, Nicaragua, and certain countries of South America, the present aborigines use ridged wooden mallets resembling the Polynesian for making bark clothing.

It may also be affirmed that there is no other form of implement than the one having the combination of ridges and grooves, that is useful in expanding and separating the fibres of bark evenly without rupture, which is evident from the effect produced by the blow.

The distribution of the 31 bark-beaters measured and described by the writer is as follows: Mexico, 25; divided among the Nahuas, (12); Totonaes, (1); Tarascos, (6); and the Miztecs-Zapotics, (6). One of these in the Mexican collection has been channeled, probably by the Tarahumares, and adapted for one side of an arrow-smoother, the other side is a smaller block of freestone

of reddish color. This was taken from a cave anciently inhabited by the Cromachi. Two bark-beaters are from Nicaragua; one in the collection of Dr. Carlos Bovallins of Upsala, Sweden, and the other from the exhibit of the government of Nicaragua. One specimen is from Columbia in the collection of the Archaeological Museum of Madrid and three from the exhibit of Costa Rica.

After examining the paper upon which the Mexican codices are written, the opinion is expressed that it is not made from the magney, but is from a tree furnishing bark available for paper, probably of the family to which the mulberry belongs.

#### ETHNOGRAPHICAL SURVEY OF THE UNITED KINGDOM.

BY E. W. BRABROOK.

IN the early part of 1892, on the suggestion of Professor Haddon of Dublin, the Society of Antiquaries of London, the Anthropological Institute, and the Folk-Lore Society appointed delegates to discuss the means of combined action for obtaining simultaneous observations on the monuments of antiquity, the physical characters of the people, and their customs, traditions, and beliefs in various parts of the United Kingdom. They agreed to seek the co-operation of the British Association, which has local corresponding societies in connection with it, and received authority to act as a committee of that association, with the additions of a delegate from the Dialect Society, and of others specially representing Wales, Scotland, and Ireland. It was generally admitted that the success of the work depended upon its being taken in hand at once, since the forces impelling country folk towards the great towns, and the rapid means of transit from place to place now available to the very poorest, are fast effacing all special local peculiarities, and mixing up inextricably the races of which the population is composed.

The first step of the committee has been to issue a circular to persons known to be well acquainted with the rural districts, requesting them to indicate such villages and places as appear especially to deserve ethnographic study, so that a list might be formed, out of which a selection might afterwards be made for the survey. The villages or districts suitable for entry on the list are defined to be such as contain in general not less than a hundred adults, the large majority of whose forefathers have lived there so far back as can be traced, and of whom the desired physical measurements, with photographs, might be obtained. For such typical villages and the neighboring districts the committee propose to record (1) physical types of the inhabitants, (2) current traditions and beliefs, (3) peculiarities of dialect, (4) monuments and other remains of ancient culture, and (5) historical evidence as to continuity of race. In each such place they will endeavor to obtain the assistance of observers resident in the locality.

The response which the committee have obtained to this preliminary inquiry has been more general and encouraging than they had expected. In some places they have been met with the lament, — this ought to have been done fifty years ago, and it is now too late; but from numerous others, in all quarters of the three kingdoms, they have received information of places where the people are still primitive in their ideas and customs, unaffected by intercourse with strangers, and bear a marked strain of one or other of the races by which this country has been peopled. For the use of these informants, a brief code of directions is being prepared.

This endeavor to record the natural history of the elements which go to make up the population, so far as they can be traced in the localities where its race-elements have remained undisturbed, will, I have no doubt, interest many of those whose ancestors have carried to the United States some recollection of the peculiarities and customs of the people of that part of the United Kingdom from which they sprang.

*The Journal of Hygiene* will be the name of the *Herald of Health* on the 1st of January, 1893. The *Herald of Health* is now in its 43d year and has been edited since 1866 by Dr. M. L. Holbrook. The journal is published in New York, at \$1 a year.