

### Ravens in the United States

ON p. 336 of NATURE for February 7, Manhattan asks a question about "ravens." I do not propose to answer his question, but to state a fact. I was raised from boyhood to manhood in Tioga Co., Penn., and in my boyhood days, when the primeval forests were broken only by the recent settler's small patch scattered here and there along the valleys, the raven was as common as the crow; nor could the one ever be mistaken for the other. Before I had attained the years of manhood, however, the raven had become a *rara avis*, while the crow, on the contrary, had become vastly more abundant. The bald-eagle, and the fish-hawk, too, were then very often seen, now seldom or never. Other birds could be added to the list if desirable. The question, *why?* is not so easily disposed of as it is to state the fact. Should one be disposed to answer by saying *the rifle*, it would be pertinent to reply that the rifle was just as active against the crow, the common hen-hawk, and the crow-blackbird, as it was against the raven, the fish-hawk, and the bald-eagle; but these latter birds have all disappeared, while, in spite of the rifle, the former have increased. We must look deeper for the cause.

IRA SAYLES

Washington, D. C., March 3

In answer to the query of your correspondent "Manhattan," who writes from New York, under date of Jan. 11, concerning the prevalence of ravens in the United States, I would like to remark that ravens quite replace the crow in Nevada. I have never seen them here in the east. Mr. Ridgway who was with me in 1867-68 could give you much valuable information in regard to their habits and range.

W. W. BAILEY

Brown University, Providence, R. I. (U.S.A.), March 1

### Thread-twisting

IN NATURE, January 31 (p. 305), I read some remarks by Prof. E. B. Tylor on a "rude method of making thread by rolling palm or grass fibre into a twist with the palm of the hand on the thigh," which Prof. Tylor regards as a "savagery art" of old native tribes of Guiana, who were thigh-twisters. I have often seen shoemakers when at work prepare their threads by twisting them on the thigh with the palm of the hand. May this practice be one which has survived from a barbarous period?

Truro, March 14

J. S.

### BICYCLES AND TRICYCLES IN THEORY AND IN PRACTICE<sup>1</sup>

WHEN I was honoured by the invitation to give this discourse on bicycles and tricycles, I felt that many might think the subject to be trivial, altogether unworthy of the attention of reasonable or scientific people, and totally unfit to be treated seriously before so highly cultured an audience as usually assembles in this Institution. On the other hand, I felt myself that this view was entirely a mistaken one, that the subject is one of real and growing importance, one of great scientific interest, and, above all, one of the most delightful to deal with that a lecturer could wish to have suggested to him.

It is quite unnecessary for me to bring forward statistics to show how great a hold this so-called new method of locomotion has taken upon people of all classes: the streets of London, the roads and lanes in all parts of the country, testify more forcibly than any words of mine can do to what enormous numbers there are who now make use of cycles of one sort or other for pleasure or for the purposes of business.

Not only has the newly developing trade brought prosperity to towns whose manufactures were dying a natural death, but the requirements of cyclists have given rise to a series of minor industries, themselves of great importance. Riders of bicycles and tricycles come along so silently that instruments of warning have been devised. There are bells that jingle, bells that ring, whistles, bugles, and a fiendish horn which will utter anything from a

<sup>1</sup> Lecture delivered by C. Vernon Boys, A.R.S.M., at the Royal Institution, March 7.

gentle remonstrance to a wild, unearthly shriek. Lamps, tyres, saddles, seats, springs, &c., are made in unending variety; these form the endless subject of animated conversation in which the cyclist so frequently indulges. Cyclometers or instruments for measuring the distance run are also much used. Some show the number of revolutions made by the wheel, from which the distance can be found by a simple calculation; others indicate the distance in miles. There is on the table a home-made one of mine with a luminous face which at the end of every mile gives the rider a word of encouragement; it now indicates that a mile is nearly complete; in another turn or two you will all hear it speak.

Cyclists have a literature of their own. There are about a dozen papers wholly or largely devoted to the sport. They can even insure themselves and their machines against injury by accident in a company of their own.

The greatest and by far the most important growth is the Cyclists' Touring Club, a gigantic club to which every right-minded rider in the country belongs. This club has done more to make touring practically enjoyable than could have been thought possible when it began its labours. Railway companies have with few exceptions consented to take cycles at a fixed and reasonable rate; in almost every town in the country an agreement has been made with the leading, or at any rate a first-class, hotel, in virtue of which the touring member may be sure of meeting with courtesy and attention for himself and with clean quarters and an intelligent groom for his horse, instead of finding himself as hitherto a strange being in a strange place at the mercy of some indifferent or exorbitant landlord. In consequence of this, thousands now spend their holidays riding over and admiring the beauties of our own country instead of being dragged with a party of tourists through the streets and buildings of a foreign town. Of the delightful nature of a cycling tour I can speak from grateful experience; last autumn alone I travelled nearly 1500 miles, meeting on my way with almost every variety of beauty that the scenery of this country affords. Wherever I went I felt the beneficial influence of the C.T.C., as the touring club is called. At all the hotels—our headquarters—at which I stopped, I found the most sanguine wishes of the club amply fulfilled, our wants understood and provided for.

The C.T.C. have also done a great service in providing us with a uniform which has been proved to be as near perfection as possible. They have also designed a ladies' cycling dress, which can be seen in the library.

Though touring in the country is the perfection of our art, town riding has its advantages. I, in common with a fair number, ride daily to and from my work no matter what the weather may be: rain, snow, wind, or hail, cycling affords the pleasantest means of crossing London. Instead of waiting in draughty railway stations, of catching cold outside or being stewed inside omnibuses, or of being smoked in the Underground Railway, we, the regular cyclists, look forward to our daily ride with pleasure, for the healthy exercise, the continuous necessity of watching the traffic and avoiding ever-approaching danger, form between them a relief from mental worry or business anxiety which we alone can appreciate.

Of the dangers of the streets I have little to say: the regulation of the traffic by the police, and the consideration of drivers, though they are not in general too fond of us, make danger in the quarter from which it might be expected very remote. Our chief difficulty is due to the irregular and utterly unaccountable movements of pedestrians, whose carelessness keeps us in a continual state of anxiety.

There remains one point of the utmost importance on which I would say a few words, I refer to the effect of cycling on our general health. About a year ago there appeared in the *Lancet* an article condemning in no