



Sun's disc. It is, therefore, possible that Mercury may have an undiscovered satellite 200 miles in diameter. If so, and the satellite should be as far from Mercury as the moon is from the earth, it would take 150 days to make one complete revolution around the planet, or nearly twice as long as it takes Mercury to revolve about the sun. Such a satellite would have sufficient mass to cause Mercury to revolve in a

secondary orbit 150 miles in diameter, which would be a measurable quantity.

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#### THE DISTRIBUTION OF THE BLOW-GUN.

THE blow-gun is one of the most remarkable savage devices in which compressed air is used as a motive force. Primarily, the blow-gun is a simple tube of cane, smoothly

cleared of the joint septums, through which light darts feathered with a tuft of down, or pieces of pith, are propelled by the breath.

The blow-gun is used for killing birds and small mammals. Frequently the arrows are poisoned, rendering the light dart effective on larger game. The chief merit of the blow-gun is its accuracy and the silence with which it may be employed.

The penetration of the blow-gun dart is greater than would be imagined. At the distance of 50 feet I have driven a blunt dart one-quarter of an inch into a pine plank. It is stated that the range of the blow-gun among some tribes is from 80 to 100 yards.

Apropos to Professor Mason's paper connecting the Eastern Asiatics with the Americans along a great natural migration line, the distribution of the blow-gun may be interesting.

The blow-gun is a tropical or sub-tropical device, and may be looked for in regions where bamboo or cane grows. Nevertheless these tubes are often made of hard wood, single, or of two excavated pieces joined together, and frequently one tube is thrust inside of another to secure rigidity. The examination of many of these blow-guns inspires a great respect for the ingenuity and mechanical skill of the workers.

The curious fact of distribution, however, is that the Malays and American aborigines alone use the blow-gun. The Malay specimens of the blow-gun existing in the National Museum are from the Dyaks of Borneo, the Javanese, the Kyans of Burma and the Johore people from the Malay peninsula. The literature also supplies other Malay localities.

The North American specimens are from the Chetimachas of Louisiana, who frequently combine the tubes in series, forming a compound blow-gun and the Cherokees of the Carolinas. From Central America, the Indians of Honduras and Costa Rica; from South America, several Amazon tribes from

Ecuador east and from British Guiana employ the blow-gun. WALTER HOUGH.

#### PSYCHOLOGY.\*

PSYCHOLOGY, as we all know, is the 'science of mind.' But such a definition does little more than raise the question, What is mind? We cannot take mind for granted, for it is the very thing that psychology has to investigate. And yet, although 'mind' is one of those words which it is impossible to define, everyone is able to attach some sort of meaning to it. What do you yourselves mean when you talk of your 'mind?' You mean, probably, some particular group or set of your internal experiences; some tangle or other of feelings, thoughts, desires, resolutions, ideas, wishes, hopes, actions, emotions, impulses, expectations, memories. There are plenty of words, expressing different 'sides' of mind, as they are called. Mind, then, is the sum total of all these experiences—of all these processes. There is no mind beyond them; the term is simply the collective name of all such processes as those which I have enumerated.

I said, however, that when you talk, in an everyday way, of your 'mind,' you probably refer to some special set or group of these experiences. When you say, "I cannot make up my mind whether to do it or not," you mean that you cannot make up your present mind. Now here the psychologist makes a distinction. We use the term 'consciousness' to express the mind of the present moment. Thus if I were to ask you to tell me something of your experiences just now, I should say to you: "Look into your consciousness, and see whether so-and-so is taking place or not." Or, again, if I were to analyze for you your present state of mind—to try and imagine what is going

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