

for us to obtain in a similar amount of blood from a needle prick. Thus, in good thick smears under 22 millimeter ($\frac{1}{2}$ -inch) cover glasses, we will usually find but one or two, and oftentimes no filariae. In the blood from the stomach of a mosquito which has recently bitten, the amount of blood usually appears to be less than in these thick cover-slip preparations, but it is nearly always possible to find from 40 to 80 filariae, and it has occurred to us that this fact might have a practical value in examining cases of suspected filariasis in which the parasites are so few in number as readily to be missed. It might be of use in revealing embryos in the blood of cases of elephantiasis, where the filariae, though believed to be present, are seldom found. We have not had an opportunity to put our suggestion into practice except on our last four cases of known filariasis, in all of which the result has been as stated.

So far as is known, this observation regarding the phenomenon described has not been confirmed by other workers, but it would appear to merit further study, both from the standpoint of scientific interest and practical diagnostic importance. In view of the fact that the same phenomenon occurs in *Onchocerca* infections, it is probable that it also occurs in other conditions in which parasites are transmitted by blood-sucking insects.

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AINU PITS IN THE KURILE ISLANDS

In the summer of 1931 I had an opportunity to visit the largest of the Kurile Islands, Etorofu. Arriving there on August 3 at a small village called Rubetsu, our party proceeded to cross the island on foot, collecting on the way. That evening at dusk we came to the Pacific Ocean and chanced upon some Ainu pits. At that time we only found a few broken pieces of pottery.

The next day, while hunting for new specimens of spiders, a slight exposure of shell near one of the Ainu pits was found. Upon investigation at a near-by village of Toshimoe, we found that these mounds had never been opened.

After digging in these mounds for two days we found a large quantity of pottery—mostly broken pieces and one complete vase with a good bear design. Several bone tools were also found, one a U-shaped instrument made from whalebone, the use of which has not been determined. As far as known this is a new find and not recorded from any other mound in Japan. The shells were found under twelve to eighteen inches of soil. The heap was to the north of the pits and had probably been thrown there from the doorways of the huts.

The age of the finds is an extremely difficult matter to determine. All evidence points to a stone age period, but as the Ainu, in isolated places, continued to use stone after contact with the Japanese their age can not be determined. A safe estimate would place the date at no more than five hundred years ago. The pottery designs are typical of the Ainu art, though less ornate than those found at other places in Hokkaido and the Kuriles. On the eastern coast of Etorofu at Wannippu there are many Ainu pits, and in a trip of less than five miles over forty pits were counted.

The larger part of this material is now in the Hokkaido Imperial University at Sapporo, where other valuable finds have been placed. A detailed study with drawings of it will be made this coming year.

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THE JESUIT FOURTH VOW

IN view of the statement of Dr. José F. Nonidez in *SCIENCE* for May 6, pp. 488-489, it will be of interest to the readers of this journal to know the precise wording of the fourth vow taken by some of the members of the Society of Jesus (the Jesuits). The Latin text is: "Insuper, promitto specialem obedientiam Summo Pontifici circa missiones, prout in iisdem litteris Apostolicis et Constitutionibus continetur." (*Constitutiones Societatis Jesu, Pars V, Caput III, 3; 1869 Ed., I, 78*). Translated this is: "Besides, I promise special obedience to the Supreme Pontiff in regard to the missions, according to the content of the same Apostolic Letters and Constitutions (*i.e.*, Papal Letters of Approbation and Constitutions of the Society of Jesus)." It is obvious that this vow is implicitly contained in the third of the immediately preceding three religious vows which Dr. Nonidez rightly says are unobjectionable, and that it only stresses a point of religious obedience, the substance of which is common to all religious orders that engage in missionary activities. It is of purely spiritual import, and does nothing more than express a readiness to go anywhere in the world on missionary duty if the Pope should so command.

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THE Board of Trustees of *Biological Abstracts* is now in position to assure readers of *Biological Abstracts* that the editorial and publication difficulties that have stood in the way of prompt issuance of the indexes have been overcome, through a grant for