## MEASUREMENTS OF HUMAN CRANIA

TO THE EDITOR OF SCIENCE: For many years students of physical anthropology have been handicapped by the lack of reliable cranial measurements from the American area. The National Museum in Washington and several other museums contain rich collections of crania, but no satisfactory measurements of these have been published.

After some discussion of the situation with Dr. Aleš Hrdlička, curator of physical anthropology at the National Museum, and correspondence with the secretary of the Smithsonian Institution, a plan has finally been adopted by which the large collections in Washington will soon be made available. Measurements of the entire series of human crania will be made under Dr. Hrdlička's direction and published in the form of a catalog which will be issued in parts in the Proceedings of the U. S. National Museum. It is expected that several parts will be printed each year, the first being already in press.

It is to be hoped that other museums will now follow the lead, and that in this way the large mass of materials which they contain for the study of the physical anthropology of the American Indian will, in similar fashion, be made available for students.

ROLAND B. DIXON

HARVARD UNIVERSITY, SEPTEMBER 15, 1922

## BIBLIOGRAPHY AND RESEARCH

To THE EDITOR OF SCIENCE: A clearer portrait of the "book sciences" than that in Mr. W. W. Bishop's "The Record of Science," I have never seen in the ten years that I have been engaged in library work.

Many of the thoughts expressed in Mr. Bishop's address have been uppermost in the minds of many of the directors of the laboratories of book science, if I may be permitted to borrow Mr. Bishop's phrase. Many of us have seen this college and that college, this large concern and that large industry, endowed with munificent funds for research. In 1920-1921 there appeared in our leading index to technical periodicals over 100 titles relating to research work. The National Research Council has published a second edition of "Research Laboratories in Industrial Establishments in the United States," listing some 526 industrial houses operating laboratories devoted to research in one form or another. The same institution later published a list of the sums invested in research fellowships and endowments. The total endowments and fellowships amounted to 565, representing, in round numbers, over \$22,000,000.

Now Mr. Bishop has pointed out that bibliography is the *foundation* of research. Yet I fail to find any specified sum set aside for a well equipped laboratory of book sciences. I doubt if 50 per cent. of these 526 industrial concerns supporting laboratories own and operate respectable laboratories for research in facts, or as I choose to call these libraries, laboratories for "research fact-oring." In fact, I know of one organization that spent over \$400,000 for a research laboratory and yet in its laboratory for research fact-oring, it did not invest one tenth of that amount.

Now, then, why not promote sentiment for the establishment of endowments for research laboratories in "fact-oring" and fellowships in book sciences?

K. C. WALKER

## AN UNUSUAL SOLITAIRE GAME

DEAL at random 25 cards from a pack of 52 playing cards and arrange them in five complete poker hands any one of which may be a flush (such as any five hearts), a straight (such as 3, 4, 5, 6, 7, or Ace, K, Q, J, 10, not necessarily of one suit), or a full-house (three of one kind and two of another).

Various persons have tried this solitaire several hundred times and worked it without finding a single case of failure, occasionally after many attempts. It was believed that it would always succeed. After some reflection, the writer invented the following impossible deal:

Diamonus:	4,	٠,	પ્ર.						
Hearts:	з,	4,	9,	Q,	K				
Clubs:	1,	3,	5,	6,	7,	8,	10,	J.	
Spades:	1,	2,	4,	6,	8,	9,	10,	J,	К.

with exactly two of each kind, excepting the