the region was carried on independently and in the company of Professor White. There appears to be abundant evidence to show that during the last ice invasion, in a hilly portion of Holmes, Ashland and Richland counties in Ohio, the ice-sheet did not melt back with a definite front, but stagnated in the valleys. The ice-sheet advanced from the Lake Erie region southward over the Allegheny escarpment, upon the Appalachian Plateau, which rises gradually to an elevation of about 1,300 feet above sea-level in Holmes County, where a major divide extends in an east-west direction. The ice, loaded with debris and comparatively thin, pushed slightly over the divide and stagnated in the valleys. The glacier near the ice-front melted away in ragged fashion, and it is believed that the ice first melted from the uplands, exposing the hills and ridges. Across this area there was no definite ice-front at any time during the melting of the glacier. The deposits in the valleys and bordering them are kames, kame terraces and a few eskers, and are such as would be deposited from and around detached blocks of stagnant ice. The best development of these deposits is present in the broad valley extending from Mansfield to Shreve and in some of the tributary valleys. Several lakes, such as Odell Lake, Long Lake and Round Lake, represent a series of kettle-holes once occupied by blocks of ice. Ice-contact slopes appear at places around them. Kames and occasional kame terraces appear to be numerous in a zone along the sides of the valleys. The belt in which stagnation occurred is ten or more miles wide and extends from a point beyond Millersburg on the east to Mansfield on the west, a distance of possibly thirty-five miles as the crow flies. Further investigation may disclose similar evidence of stagnation in other portions of Ohio.

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THE ALLEGED TRANSFORMATION OF SERUM ALBUMIN INTO SERUM GLOBULINS

THE old claim that serum albumin may be transformed into serum globulins has recently been revived, this time with heparin as the transmuting agent.[1] The criteria of identity given by Fischer are all physical characteristics, and it seemed of interest to apply also the more delicate and specific methods of immunology.

We have found that the addition of heparin to crude horse-serum albumin at pH 5 did cause the precipitation of a substance soluble in salt solution and precipitable by half saturation with ammonium sulphate, but that the addition of heparin to carefully purified crystalline serum albumin did not cause any flocculation. In both cases we found that the albumin-heparin mixture or compound still reacted to the same degree as albumin with an anti-albumin serum, and did not react with anti-globulin serums prepared either by injecting isolated globulin or by adsorbing an anti-horse-serum antiserum with albumin. The latter reacted readily with globulin.

It would seem inexact, then, to say that albumin-heparin compounds are identical with serum globulins. Details will be published elsewhere.

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TRIPLETS

ALTHOUGH there have been many investigations of the resemblances between siblings, identical twins and fraternal twins, no extensive study of triplets has been made. Because of the possibility of one, two or three egg fertilizations, the study of triplets offers a unique opportunity to secure information on the influence of heredity and on the differential effects of environment. A study of triplets is now under way at the Institute of Child Welfare of the University of Minnesota. Since triplets are difficult to locate, the institute requests that any one knowing triplets send their names and addresses to the Institute of Child Welfare, University of Minnesota, Minneapolis, Minn.

JOHN E. ANDERSON,
Director

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

MATHEMATICS, PHYSICS AND ASTRONOMY AT ATLANTIC CITY

FORTY-ONE scientific societies will meet with the associati on at Atlantic City, from Tuesday, December 27, to Saturday, December 31, 1932 (see SCIENCE, for October 28, for list of societies and hotel headquarters). Many of these are planning important sessions for the reading of papers on timely topics (see SCIENCE, for November 11).

The first session of the thirty-ninth annual meeting

[1] A. Fischer, *Naturwissenschaften*, 19: 965 (1931); 20: 471 (1932). C. r. Soc. Biol., 108: 882 (1931). SCIENCE, 75: 443 (1932). *Klin. Wchnschr.*, 11: 936 (1932).