puncture of hamsters infected with kala-azar shows that the large phagocytic cells, which form the characteristic lesions of the disease and contain the kala-azar parasites, have the staining qualities of reticulo-endothelium.

By marking out the cells of the reticulo-endothelial system of animals infected with kala-azar with intravenous and subcutaneous injections of India ink, one sees that the distribution of the lesions and of the parasites is practically limited to this system.

Attention has been called to the nature and wide extent of the lesions in the skin and subcutaneous tissue.

This is a preliminary report.

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Antigenic Character of Denatured Egg Albumin.

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The object of the present study is to determine the effect of denaturation on the immunological properties of egg albumin, and to show the relation between the albumins denatured by different methods.

The agents of denaturation used in our study are dilute acids and alkalies, alcohol and heat. Proteins denatured by these different agents have been variously called acid albumins, alkali albuminates, heat coagulated, and, alcohol coagulated proteins. Superficially these substances are similar, and previous work[1, 2, 3] from this laboratory has shown that they are indeed essentially the same in chemical and physical properties. This we have tried to verify by biological methods.

The acid and alkali albumins were prepared by mixing 1 per cent egg albumin solution with equal volumes of H/10 HCl and N/10 NaOH. After 2 or 3 days the denatured egg albumin was precipitated by neutralization and purified by repeated precipitation. The heat-denatured albumins were prepared by heating 100 cc. of 1 per cent egg albumin solution to which 1 cc. of N HCl or N Na_2CO_3

has been added. The acid or alkali was added to prevent flocculation. The alcohol albumin was prepared by adding 40 cc. alcohol to 50 cc. 1 per cent egg albumin to which 10 cc. of 0.3 N Na_2CO_3 have been added. This solution was allowed to stand over night before using.

In testing the antigenic character we used precipitin and anaphylactic reactions. Both reactions show that the denatured albumin, whatever be the agent of denaturation, is immunologically different from the natural albumin. The albumins denatured by different agents are closely related, though not identical.

This is a preliminary report.

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The Period of Induction in Blood Clotting.

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What are the changes taking place in blood plasma from the time it is drawn until the first fibrin appears? Although this period of apparent inactivity occupies the major portion of the so called "clotting time," it has received very little attention from students of the problem of blood clotting. Our recent work establishes certain facts concerning this latent period, or period of induction.

First, fibrin production is not a continuous process, beginning when blood is drawn, but occurs with sudden onset and rapid completion in only a final small part of the "clotting time." If one oxalates plasma only a few seconds before the first signs of fibrin appear, the clotting is completely inhibited. Under such conditions we find the blood fibrinogen unchanged, so that the final appearance of fibrin as a clot represents its actual time of production. Second, since thrombin acts well in the presence of oxalate, we must conclude that, up to the time of oxalation a few seconds before clotting occurs, there has also been no thrombin formed.

Third, preformed thrombin takes over twice as long to clot citrated plasma as it does to clot this same plasma immediately after recalcification, although calcium has no influence on the action of such preformed thrombin. From this we must conclude that the