FIG. 3. Carcinoma of breast infiltrating into lymph node, cut after conversion of frozen tissue to paraffin block. Haematoxylin and eosin, $\times 300$.

The fact that excellent sections can be easily prepared by the cryostat should do much to encourage the extended use of this method in the routine laboratory. The ability to treat such frozen tissue so that it can be stored and therefore available for future paraffin sectioning should assist in making 'frozen histology' more generally available.

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Simple method for the estimation of platelet adhesiveness

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Current means of estimating the adhesiveness of blood platelets either utilize special equipment, such as standard glassware (Wright, 1941), complex motor-driven constant flow devices (Hellem, 1960), or else they do not define a constant contact area of glass (Moolten and Vroman, 1949; Hellem, 1960). The method described here is both simple and reliable.

Blood is taken by clean venepuncture from an antecubital vein into sequestrene in plastic containers to give a final concentration of 4.5 mM. This anticoagulant though it reduces the overall adhesiveness (Marx and Derlath, 1957), prevents non-specific clumping and preserves platelet morphology. With heparin results were at times difficult to assess owing to marked platelet clumping. The platelet-free plasma is prepared by centrifugation at 2,000 *g* for 20 minutes. Siliconed bottles are first thoroughly cleaned in 'chromic acid,' washed in tap water followed by distilled water. After oven drying they are given three coats of Repelcote (Hopkin and Williams Ltd.). Cover slips are cleaned in concentrated nitric acid washed clean of acid, and polished with alcohol.

The test is done by mixing 1.0 ml. of blood and 0.5 ml. of platelet-free plasma in each of two siliconed bottles inserting a cover slip into one and shaking both bottles for 90 minutes, either on a reciprocating shaker or a rotating Matburn mixer. Platelet counts are taken both at the end of this period and adhesiveness calculated from the ratio of the control and experimental platelet counts. Ten of the 16 squares of a Neubauer chamber are counted on each side to give an overall cell count of 800 to 1,000 in cases of thrombocytopenia additional counting chambers are used to bring the overall number of cells counted into the stated range. No attempt was made to relate the adhesiveness to the initial blood platelet count as even shaking or mixing in coated bottles for this period of time can cause a drop in platelet count of 10% (Wright 1941) and even greater platelet losses occur with reciprocating mixers. The results obtained for a series of 12 normal individuals, ranging in age from 20 to 49, varied between 91 and 78 (expressed as the percentage of control count). Standard deviation of replicate determinations was 2%.

¹The time of 90 minutes was chosen because adhesion appears to be maximal around that period; however, results can be obtained in 40 minutes or an hour.

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