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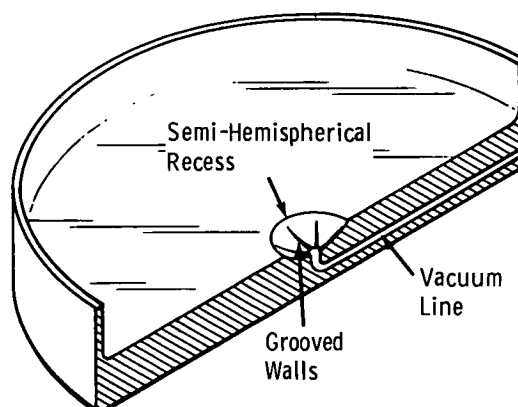
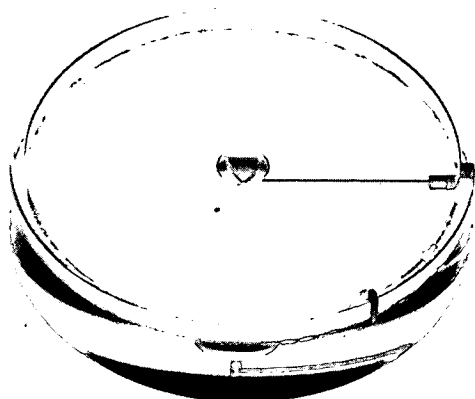
# NASA TECH BRIEF

## Lewis Research Center



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### TISSUE HOLDER FOR EXPERIMENTAL AND DEMONSTRATION SURGERY



A problem in experimental and/or demonstration surgery is the difficulty of holding fresh tissue in a proper position. This difficulty has been overcome by the use of a tissue holder employing vacuum or suction (see photograph).

The problem of holding excised animal eyes for surgery arose from a project concerned with the development and evaluation of a new eye surgical tool and technique. Because of the softness and slipperiness of the eye tissue, holding the eye in a proper position while surgery was performed was very difficult. The problem was solved by constructing a plastic dish having in its center a hemispherical recess approximately the size of the excised eyes. A hole drilled in the bottom of the recess is connected to a vacuum line. A low vacuum applied to the hole holds the eyeball firmly in the recess. The walls of the hemisphere are grooved vertically from the vacuum hole upward nearly to the surface of the dish. These grooves keep the eyeball from rotating in the recess during surgery (see sketch).

#### NOTES:

1. With slight modifications, the holder can be used for retaining other types of tissue for examination and/or surgery.
2. No additional documentation is available. Specific questions, however, may be directed to:  
Technology Utilization Officer  
Lewis Research Center  
21000 Brookpark Road  
Cleveland, Ohio 44135  
Reference: B72-10630

#### PATENT STATUS:

NASA has decided not to apply for a patent.

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(LEW-11755)

Category 05