TRANSLUCENT MODEL OF THE CEREBRAL VENTRICULAR SYSTEM

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At the third International Neurological Congress at Copenhagen in August 1939, I demonstrated a translucent hollow glass model of the cerebral ventricular system. Since then this model has been used extensively and has proved its value. An improved model has now been constructed, which offers more possibilities than the previous one. As can be seen from Fig. 1, the model is fixed in a metal frame,

![Image](image_url)

**Figs. 1-6.** Translucent model of cerebral ventricular system (1/2 of original size). For the sake of contrast in reproduction, the fluid (alcohol 96 per cent) has been coloured with transparent black watercolour.

which outlines the contours of the head. The ventricles take up their normal place in the head. It can be filled partly with air, partly with fluid; the relation of these two can be varied at will. The head-frame can be moved freely in all directions because it is mounted on top of a standard. The style of this standard contains two socket-joints, which allow for every required movement and position; some of the many positions are shown in Figs. 2, 3, 4 and 5. The subdivisions can be taken apart (Fig. 6).

* The glass-models are constructed in the glass-works of Mr. H. Daudey at Haarlem, and can be ordered at Fa. Halginex, Postbus 32, Haarlem, Holland.
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Such a model has two main purposes: (1) It shows how the air and the fluid are distributed inside the ventricles in different positions of the head. It is of great value in studying the movements or succession of movements by which special parts of the system, such as 3rd or 4th ventricle and the temporal horn, can be filled most completely. (2) It shows how pictures of parts of the ventricular system can differ, depending upon the amount of air. If the amount is small it is much more difficult to fill the various parts; and one can see easily how the picture of the same part, i.e. the anterior horn, in the same position of the head varies considerably with different amounts of air. This is a great advantage of the model and has made it possible to read ventriculograms in cases with partial filling much more accurately. It certainly has avoided misleading and faulty conclusions, sometimes even unnecessary or inaccurate operations.

The only drawback to the model is that its walls are rigid. Pathological conditions therefore cannot be reproduced. But this seldom belongs to the possibilities of any model. It is, however, the study of the normal anatomical and physiological processes, closely imitating what happens in vivo, that has proved so often its considerable value in judging the findings in pathological processes.

The model is of direct importance to neurologists, neurosurgeons, and neuroradiologists, who can use it with great benefit during ventriculography.* But also for teaching purposes it has superior advantages; much better than lengthy theoretical explanations it offers to the students in a short time a vivid and accurate impression of the anatomical structure and of what is going on inside the ventricles during ventriculography.

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REFERENCE