

on the machine. Complete alternating-current operation of the amplifier is provided, including polarizing potentials for the photoelectric cells and energy for the exciter lamps. The housing that forms the base of the sound heads contains the amplifier and transformers. The outputs of the sound heads are directly connected to the amplifier, and the individual levels are adjusted by varying the brightness of the exciting lamps. These controls are shown at the left in Fig. 1a. A volume control is provided for adjusting the combined levels. The assembly runs either forward or backward, enabling one to go back a short distance to re-check a sequence without re-winding and re-threading. Lacking all the complications and the mass of selsyn or interlocking motors commonly used to synchronize a number of sound heads, this device stops and starts quickly, a very desirable feature when tracks must be moved a frame at a time and checked until found correctly synchronized. The entire machine occupies a floor space of only two feet by four feet, and is mounted on casters to facilitate moving it from room to room.

The need for such a device became apparent during the assembling of effects tracks for the Radio picture, *King Kong*. After some experience, it was possible for the film editors to mix their sound tracks on this machine and make all necessary checks without running in a projection room, as had formerly been the procedure. The triplex moviola was built for the RKO Studios by the Moviola Company of Hollywood.

BOOK REVIEW

A New System of Cinematography in Relief (Due Nuovi Sistemi di Cinematografia in Rilievo). DOTT. ING. GUIDO JELLINEK. *Liberia Editrice Politecnica*, Milan, 1932. In this monograph, which is hailed on the cover as "a revolution in the technic of the cinema," two proposed systems of projection in relief are discussed, and some crude experiments in support of the theories developed are described. The two "new" systems are, first, photographing the object by films in a series of different planes and, second, the use of a lenticular screen of the Lippmann type. The discussion and the experimental apparatus pictured serve to emphasize the fact that solutions of the problem along those lines run to great complexity of machinery and extreme refinement of apparatus adjustment. It is not clear that the author has carried his studies or his experiments far enough actually to establish the validity of his methods, even if they could be made practicable. Thus it is not clear how a series of images in different planes are to be prevented from blanketing each other; and in his proposed utilization of the Lippmann principle the author does not appear to realize that the images as obtained would be pseudoscopic instead of stereoscopic.

H. E. IVES