True Stereo View in Single Photo

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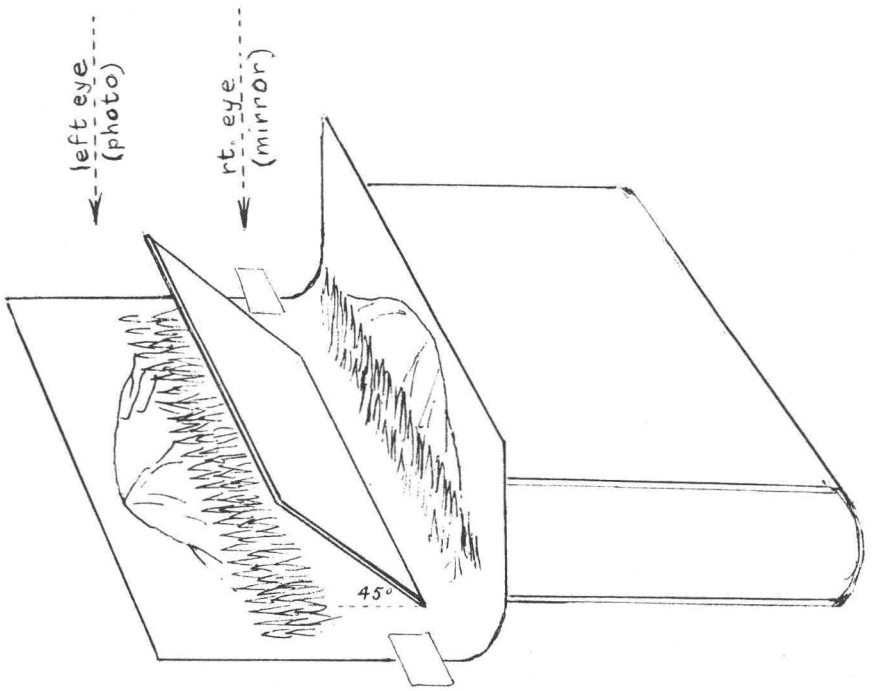
HAVE you ever heard of a single photo providing a true stereo 3-D view?

I would not have thought this possible until one day, as I gazed at a large beautiful color view of Mt. Rainier (from a Union Pacific calendar) on my wall, I suddenly saw that this picture had unique photogrammetric qualities. Thousands may be familiar with this famous view of snowy and craggy Rainier in the upper part and its equally detailed image in the lower part in Reflection Lake, with the dense stand of forest in between also mirrored. The upper airline image and the lower inverted one should incorporate the parallactic effects of greatly separated viewpoints.

How might these be gotten into stereo position in the same orientation?

The sketch shows my method that accomplished this. I taped the large picture to the table at the two places shown, and moved a thick book against the upturned bottom side of the picture so that the reflected mountain was approximately vertical. I held a rectangular mirror at a 45° angle as shown, and while looking down from directly above brought the two mountain images, now oriented the same, to fusion. Not only was the mountain seen in fine 3-D relief, but likewise was the forest in front, separated from the mountain by a conspicuous interval of distance. And viewing all this turned over on the side did not detract from the realism. But changing the set-up so as to view the airline mountain (instead of the lake mountain) in the mirror gave reversed relief.

More fun than the mountain, and more readily available to lots of people, there can be seen, by this same trick, three cute girl-scout brownies in plump, rounded form, on the March sheet of the current 1963 Girl Scout calendar. The appropriate picture title states: "Twist me and turn me and show me the Elf—I looked in the water and saw—."



EDITOR'S NOTE—This very interesting but brief description was sent in by Mr. Desjardins. The first two paragraphs were in his letter of Feb. 21, 1963. The last paragraph was taken from his "postscript" of April 5. With this intriguing use as a starter, it is hoped that he or some other photogrammetrist will prepare and submit an expansion.