The leaves surrounding the real flowers develop a red pigment in place of the usual chlorophyll.

The "Mexican Flame Leaf," a native of Mexico and Central America, has a lesser known cousin in a variety with white bracts instead of red. There is also a double variety in which the colored leaves are branched.

Science News Letter, December 25, 1943

OPTICS

3-Dimensional Pictures Used to Teach Navigation

TWO PICTURES, one superimposed on the other on a specially treated plastic sheet with the outlines seemingly not quite coinciding when viewed by the naked eye, do coincide when seen through special goggles, and stand out from the sheet as a single three-dimensional object. The three-dimensional picture is called a vectograph; the goggles are called polarizing three-dimensional viewers.

The three-dimensional vectograph can be thrown on a screen by any ordinary

projection apparatus, and viewed by a group of people simultaneously if each person is equipped with the polarizing three-dimensional viewers. These are small plastic pieces of specially prepared transparent material held in frames similar to ordinary eyeglasses.

The new technique has recently been perfected by Prof. John T. Rule of the Massachusetts Institute of Technology, and is used by him in teaching aircraft navigation to military students. It eliminates the need for training men to interpret depth in flat charts by presenting life-like pictures of models of the heavens and the earth in three dimensions. Celestial navigation vectographs "teach students, easily, to see and think three-dimensionally," he states.

Formerly the only practical threedimensional viewing device was the stereoscope. This, however, could be used by only one person at a time and was therefore of little use in a classroom. The vectograph process is the invention of Edwin H. Land and Joseph Mahler of the Polaroid Corporation.

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SPEEDS NAVIGATION TRAINING—MIT Prof. John T. Rule examines the globe which serves as a photographic model for three-dimensional pictures known as vectographs, which he uses in a new technique to teach military courses more easily and quickly. An instructor walking into the beam of a vectograph of this globe projected on a screen appears actually to be walking into the center of the earth itself.





Men of Good Will

★ "PEACE ON EARTH, good will towards men," is the version we commonly hear. A sentiment of grand, widehearted charity that takes in all mankind; so inclusive in its sweep, indeed, that few of us ever achieve the courage to believe in it and practice it fully.

Yet grand as it is, this expression limits itself. Strictly read, it offers good will only to human beings; that is, it is essentially simply a sociological ideal. It needs to be made much more inclusive, to take in the whole of the living complex of which man's life is an inseparable part. That is, it needs to become in the widest sense an ecological ideal.

A better translation, from this point of view, may be found in St. Jerome's version, which renders into English as, "Peace on earth among men of good will."

That is a far less easy-going way of putting the idea; for it will be noted that it places upon all of us the obligation to become men of good will before we can expect peace. It should, incidentally, cause a good deal of heart-searching in these days when some proposed "peace" terms fairly drip with the most vindictive ill will toward the foes we expect to defeat.

But that is not the present theme, nor is it the whole crux of the building of ultimate peace. Whoever aspires to be homo bonae voluntatis, and so worthy of peace in his own heart, should examine his conscience well, to be sure that he is doing whatever lies in his power to end abuses of forests, grasslands, natural waters and the creatures that therein dwell, and to bring about legitimate and temperate uses of the