

Art of Argument

By Giles St. Aubyn

Here is a clear, simply written basic guide to logical thinking, showing how to spot the fallacies, the prejudices and emotionalism, the inappropriate analogies, etc., in the other fellow's argument and how to watch for and avoid the irrational in your own judgments. The author makes plain not only how but also why people resist facing the truth.

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INVENTION

Patents of the Week

A laser device that serves as a surgeon's scalpel and is now widely used in repairing damaged eye retinas and in other eye surgery received a patent.

➤ A DEVICE that replaces the surgeon's scalpel by a highly intensified, pure beam of light received U.S. patent 3,096,767.

Better known as a laser or optical maser, it operates faster than the eye can blink, and is part of the new field of controlled light radiation and instant spot-healing.

This particular laser is in active use all over the country as a surgeon's "scalpel" in repairing damaged eye retinas and other eye problems. It emits coherent, parallel rays of light and its heat can be concentrated on a spot less than a twenty-fifth of an inch in diameter.

The invention also includes an incoherent light source for preliminary adjustment before the "operation" and a device that lets a viewer watch the surgical operation without damage to his own eyes.

Assigned to Technical Research Group, Incorporated, the laser was invented by Herbert D. Gresser of Plainview, N. Y., Gerard M. Grosf and Theodore S. Shultz of New York City, and Leonard R. Solon of Yonkers, N. Y.

Collision Avoidance System

An aircraft device that will prevent collisions through a cooperative communications system earned U.S. patent 3,097,354 for five New York inventors.

Other collision devices have alerted only the pilot to the proximity of approaching obstacles. This apparatus cooperatively sends and receives signals between the planes involved.

The signals are translated into velocity, altitude, range and bearing information, in time for the pilot to avoid a collision. The device simultaneously evaluates all potential collisions and will order a certain aircraft to ascend, descend or hold, whichever is appropriate.

The collision avoidance system was invented by David P. Blowney of Huntington Station, N. Y.; Richard S. Brannin of East Williston, N. Y.; John J. Morrone of Elmhurst, N. Y.; James C. Wilcox of Bellerose, N. Y., and Joseph E. Zupanick of Westbury, N. Y.

Rights were assigned to Sperry Rand Corporation of Great Neck, N. Y.

Rust Remover

A product that removes rust by converting it into an iron phosphate coating and provides a protective shield against future moisture earned patent 3,097,118 for Clarence E. Leonard of St. Clair Shores, Mich.

Commercially known as Zincilate RCP (Rust Converting Primer), the invention coats the metal in preparation for a topcoat of paint while simultaneously removing the rust.

The rusty metal is either immersed in the water solution or the Zincilate applied with a brush.

The first compound removes the rust, while the phosphates it contains deposit a porous film of mineral salts on the metal. As it begins to dry and the water evaporates, the rust-inhibiting compound remains, coating the metal against future rust.

Zincilate is currently manufactured by Industrial Metal Protectives, Inc.

Other Significant Patents

Other patents include:

Radiation-sensitive glass that sparkles in response to gamma rays and neutrons and is used as a radiation detector, for which Robert Joseph Ginther of Temple Hills, Md., received patent 3,097,172.

A bubble-forming fish lure for which Joseph H. Smolen of Belleville, Mich., received patent 3,096,598. The valve assembly inside the body of the fishing lure discharges compressed air that is re-pressured by means of a small hand pump.

An adjustable golf club, that adjusts the angle between the club shaft and head on the putter earned patent 3,096,982 for Charles S. Bassin of Springfield, Mass.

An improved animal drinking fountain to be manipulated by the nose of the thirsty animal earned patent 3,095,856 for George D. Prentice, Milwaukee, Wis. Patent rights were assigned to A. F. Klinzing Co., Inc.

• Science News Letter, 84:62 July 27, 1963

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