

## TYPOGRAPHY

# Rubber Plates May Offer New Technique In Printing

A PROCESS for printing from rubber plates has been developed by the B. F. Goodrich Company, which promises to alter traditional methods of printing. Rubber plate printing is said to be the first major departure in the art since Johann Gutenberg discarded wooden blocks for movable metal type in the 15th century.

Printing from rubber type is not new itself. Everyone is familiar with the "rubber stamp," which has long been used to stamp out short notices or designs. Until recently, however, rubber as a substitute for metal in jobs requiring thousands of copies was thought to be impractical.

The new "elastotypes," or rubber plates, overcome many of the former objections to rubber as a printing material, and have several advantages over ordinary metal in certain types of work. They are particularly well adapted to printing on fragile or brittle materials such as tissue paper, Cellophane, celluloid, wood, metal, fiber, and glass, which might be injured by metal type. Bond and other hard surfaced papers print better from rubber because it conforms to the irregularities of the paper and is less affected by pressure change. Tests indicate that because rubber spreads a thinner film of ink than metal the saving of ink runs as high as 30 or 40 per cent. For the same reason printing from rubber dries more quickly.

On the other hand, rubber swells when oil inks are used, and certain special inks are required to reduce the swelling to a minimum. As yet, halftones, except very coarse screen, cannot be printed successfully in long press runs.

It is in the field of book printing that rubber plates offer the greatest promise for the present. Books have never been printed from the speedy rotary presses, as large newspapers have. They are usually run off on flat bed presses. Because rubber plates can be curved without distorting the type faces, they may make book printing on rotary presses practical. Scribners' Press recently printed the first book from rubber plates in the United States, "The Emerald Murder Trap."

"Elastotypes" are made from any original form such as type, electrotypes

or linotype. First a matrix is made in an extremely accurate molding press from a sheet of thermo-active material, under carefully controlled temperature. The making of this matrix, which is inert, infusible, and not affected by age, heat, cold, or moisture, takes about ten minutes.

Then the matrix and a quantity of unvulcanized rubber are used to make the rubber plate in the same press under similar conditions. This takes about twenty minutes. When finished, the plate is removed from the matrix, trimmed to the proper size and mounted. In mounting, the rubber plates are attached to metal plates by an adhesive on the reverse side, protected by an easily stripped-off sheet of muslin exactly like a patch used on an old automobile inner tube. This can be done in one minute or less, making a saving in time and cost.

*Science News Letter, August 10, 1935*

## PHYSIOLOGY

# White Hair Turned Black; Cholesterin is Credited

WHEN the white-haired turn black-haired or auburn-haired or change to any other color of the spectrum, their cynical friends jump to the unkindly conclusion that the aid of dye chemistry has been invoked. This suspicion, it would seem, is not always justified.

A case that is singularly well documented has just been recorded in the journal of the Danish Medical Association by a physician who was not only himself the subject of the phenomenon he records, but who also invites his skeptical colleagues to come and see, to pinch and palpate, and to undertake whatever other test they like, within reason of course. His record of himself is as detached and impersonal as a personal record can be.

"For the past 10-15 years I have been white-haired, and I can stoutly affirm that at any rate for the past 5 years I have not had one dark hair on my head—apart from a quite narrow strip on the nape of my neck."

## AERONAUTICS

# Stratosphere Flight May Start From Scott Field

SCOTT Field, former site of the Army Air Corps training school for balloonists near Belleville, Ill., may be the scene of the next stratosphere flight of the National Geographic Society-Army Air Corps.

If it is decided to attempt another hop to the upper regions of the earth's atmosphere late this fall in the balloon Explorer II, Scott Field would be admirably suited to the take-off.

Its central location would make it more easily possible to reorganize the stratosphere expedition than at distant Rapid City, S. D. Moreover, facilities for handling balloon flights plus a highly trained ground personnel are additional advantages.

Preliminary surveys indicate that October is a favorable month. Further checks against the records of the U. S. Weather Bureau for the region are now being made.

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Mountain sheep are almost extinct in Washington and Oregon.

One day, he continues, he had his hair cut, and when he came to survey the barber's field of operation he was rather surprised to find some stray dark hairs between the white hairs on the top of his head. He had for some time been rubbing a 2 per cent. cholesterin ointment into his scalp with the object of keeping his white hairs on it; and he wondered if this modest objective might possibly have achieved something much more ambitious.

At all events, he had been given a clue and he decided to follow it up, although, as he dryly remarks, "it was far from my wishes, after having been white-haired for so many years, to become dark-haired again or even merely grey-haired."

He proceeded therefore to rub the ointment into his scalp twice a week. After he had done so for three months, he found that the proportion of dark hairs to white was about as one to four.

*Science News Letter, August 10, 1935*