

15¢

\$5.50 A YEAR



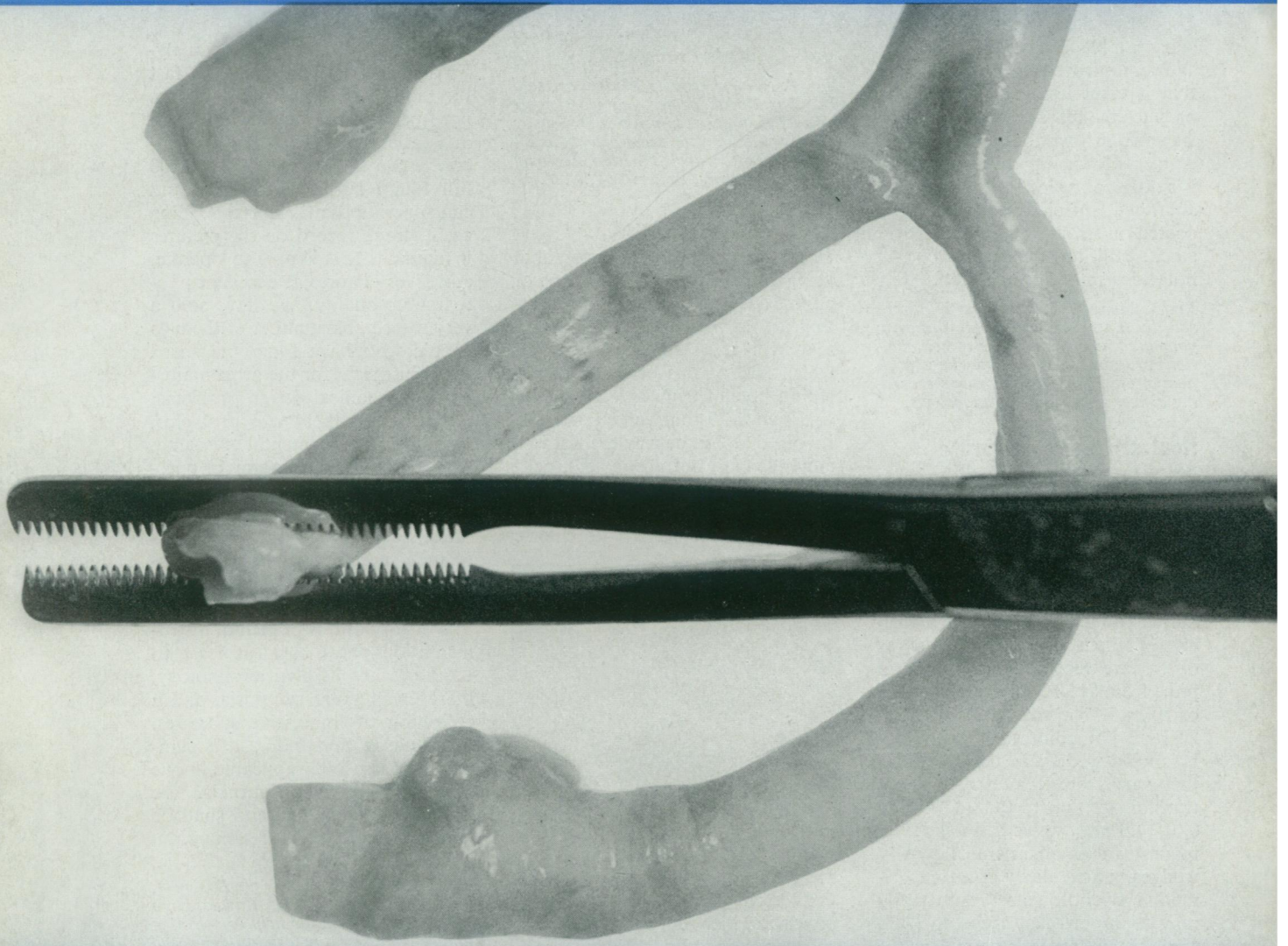
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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Limb-Saving Clamps

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A SCIENCE SERVICE PUBLICATION

Kodak reports to laboratories on:

an improved paper for photorecording . . . circular neutral density wedges . . . taking the hemin out of hemoglobin . . . high speed movies.

Photorecording

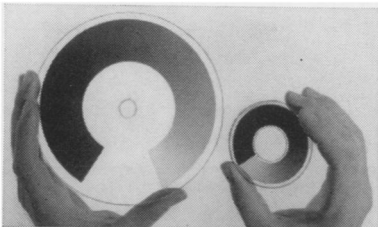
"Once you've selected a Kodak Linagraph Paper or Film best suited to your requirements, you can treat every roll of it alike without concern about adjusting exposure and processing practices." We make that statement in our literature and we stand behind it, even though, if you've purchased Kodak Linagraph 809 Paper recently, you may have noticed that the same exposure results in a blacker trace than before. We've improved the emulsion so that it takes less exposure now to produce the blackness you like, and we've done it without increasing the danger of fogging by stray light. It's still an abrasion-resistant, matte-surfaced, quick-fixing emulsion coated on strong, pure white ledger stock, still accepts pencil or ink notations smoothly and well.

Kodak Linagraph Papers and Films are sold by the Kodak Industrial Dealer in your area, and the number of combinations of types, sizes, and spooling specifications available for your photorecording convenience runs into thousands.

Neutral density wedges

Among the many items—photographic, chemical, and optical—which Kodak supplies to small but earnest clientele are neutral density wedges composed of a carbon dispersion in gelatin on glass. As a matter of fact, there is quite a variety of them which we make as orders are received. They vary in price from \$15.60 for a plain wedge of 10 by 1.5 cm size to \$46.55 for a 20 by 3 cm calibrated wedge with balancing wedge; in density range they vary from 0-.3 (100% to 50% transmission) up to 0-4.0 (100% to 0.01%). Lately we've had a flurry of requests for circular neutral density wedges, particularly from experimental psychologists. We are happy now to report that these too are available in several sizes. Two of the more common ones are: 1) 2½" diameter, 3½" hole, 1/16"

wedge width, 0-3.2 density range, \$9.60; 2) 5⅞" diameter, ¾" or

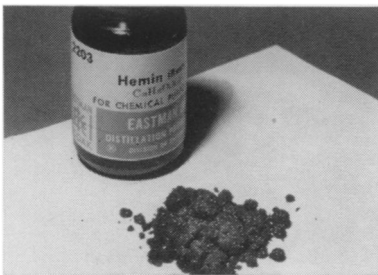


1¼" hole, 1⅞" wedge width, 0-2.0 or 0-4.0 density range, \$30.

Kodak Neutral Density Wedges are sold by your Kodak dealer, but we suggest you let us prepare him for your visit by first explaining your requirements to Industrial Photographic Division, Eastman Kodak Company, Rochester 4, N. Y.

C₃₄H₃₂O₄N₄ FeCl

Hemin is part of the hemoglobin that courses through the billions of animals that inhabit the planet. Getting it into the form we sell to researchers is a tedious process in which 3000 grams of crude hemoglobin bought from a meat packer winds up as 20 grams on our shelves. Involved along the way are hot isomyl alcohol, hot acetic acid, delicate adjustment of a pyridine-chloroform system of solvents, coagulation of protein with hydrochloric



acid, slow crystallizations from various solvents without stirring, etc., etc. From all this emerges the product, the chloride salt of an iron porphyrin in which four substituted pyrroles are joined by methylene linkages around a central iron atom. Despite the conservative "97+%"

stated in our catalog and on our label, our control lab reports semi-confidentially that the actual purity usually runs above 99%.

This is but one of over 3500 organic chemicals appearing in Eastman Organic Chemicals List No. 38. If you haven't a copy, write to Eastman Organic Chemicals Department, Distillation Products Industries, Rochester 3, N. Y.



High speed

As a tool for the engineering analysis of mechanical motions too fast for the eye or even for the sports newsreel type of "slow motion," we make the Kodak High Speed Camera. It can take from 1000 to 3200 full 16mm frames per second and can superimpose the corresponding oscillograph record on the pictures if required. It is simple to operate, and gives pictures of excellent photographic quality. We have sold a very respectable number of them to people who have found its speed range just right for the great majority of mechanical design problems. Nevertheless, there are problems, mostly in fundamental research, where simplicity, economy of operation, and even image clarity must be sacrificed for higher repetition rates. Several high speed cameras of such specialized design have appeared in recent years, and we are frank in our admiration of them. The history of this branch of instrumentation dates back at least to 1880 and has its own terminology, literature, regular symposia, and a collection of impressive successes. A scholarly and exhaustive summary of these lately appeared in one of the engineering journals. We have had it reprinted and shall be happy to send you a free copy.

For the reprint ("Special Report on High Speed Photography in Design"), for inquiries about the Kodak High Speed Camera, or for help in selecting film or plates for any form of high speed photography, address Industrial Photographic Sales Division, Eastman Kodak Company, Rochester 4, N. Y.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . serving laboratories everywhere

Kodak
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