miles—in the sense that they would keep their hands on pieces ahead while their knees and feet were on the pieces they were just leaving.

Their astronomical observations proved to have been correct and their course took them directly into the Eskimo settlement at Beechy Point, where there is a trading station. From here they made their way to Barrow, where Eielson's little finger was amputated at the mission hospital. The other fingers were saved.

His deep soundings having made it improbable that there is undiscovered land in the 600,000-mile section to the northwest of Barrow, Wilkins now plans to cross the 300,000-mile section to the northeast, where there is the best remaining chance of land. He expects to fly diagonally through the middle of it from Barrow to 84° N. Lat. and 100° W. Long. and thence to Ellesmere Island, coming down when they have to or possibly flying nearly, if not quite, all the way to Etah.

If the plane comes down anywhere on this route, Wilkins expects his party to live by hunting seals and make their way to the nearest inhabited land. This will be Alaska if they have hard luck and come down soon. It may be any of the Canadian islands, according to how far they succeed in flying; it will be Etah, northwest Greenland, if everything goes like clockwork. The outcome of the adventure can not be known before perhaps midsummer when the Danish trading ships go up to Etah or the Canadian government ships go to Ellesmere Island. If nothing is heard then or before that time, it will mean either a fatal landing or a successful landing at a distance from which the party are returning, building snow-houses in winter, using skin tents in summer and living on sea game. Wilkins estimates the maximum time necessary for such a return on foot will be two years. We wish him luck with his great adventure.

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EFFECT OF HIGH VOLTAGES ON TANTALUM ANODES

DURING some recent work with high voltages upon metal electrodes I have found that tantalum exhibits some very unusual phenomena when used as a positive electrode in certain electrolytes. Very brilliantly colored films are formed on the metal in the following order: violet, reddish purple, indigo, light blue, green gold, light yellow and finally gray. The colors were produced in succession by increasing the voltage so that any one of the above colors may be obtained by shutting off the current at the proper time. The films form just before the electrode begins to emit light and the highly colored ones disappear when tiny scintillating sparks appear on the surface of the film. The gray film mentioned above is the final product after the breakdown voltage is exceeded. The films are apparently permanent and the colors give no evidence of being formed by interference. I have been unable to reproduce them by heating or other means and am withholding any possible explanation of the phenomena until further data are available.

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LOSSES IN SPECKLED TROUT FRY AFTER DISTRIBUTION

THE Fisheries Department of Ottawa has recently received from the Biological Board of Canada a memorandum of the losses in four thousand speckled trout fry after distribution in Forbes brook, Prince Edward Island, Canada, for three months (July–October) of 1926. Mr. H. C. White, B.A., was investigator for the Board for 1926 as well as for the three previous summers. The supervising investigator was Dr. A. G. Huntsman.

The plan selected for the experiments provided that a part of the upper stretch of the brook should be subdivided into four equal sections of ten rods each. Each section was separated from the other by transverse wire screens which were fry tight. Each section was seined completely free from enemy and competition fish before an experiment began, except as mentioned below.

The object of three of the experiments was to ascertain whether (1) adult trout (any over one year old) or (2) birds, or (3) stickleback caused the greatest loss among fry after distribution. (4) The object in the fourth experiment was to determine the total loss from all natural causes combined.

Section No. 1 was left in its natural condition and planted with 1,000 fry. At the end of three months, 712 of them were missing. This compares with seventy-three per cent., which was the loss in 1925 near the same place. Of 38 adult trout in this section in the spring, only 19 survived until October.

Section No. 2. The adult trout were removed and it was screened overhead from birds. 209 stickleback were confined with 1,000 fry. Out of the 1,000 fry deposited in it, only 504 survived at the end of three months.

Section No. 3. Birds were screened from this section and all fish seined except 32 adult trout. Here only 361 fry survived out of 1,000.

Section No. 4. Stickleback and adult trout were removed from this section; but it was left exposed to birds. Out of 1,000 fry planted in the spring, only 435 were found alive in autumn.

From the foregoing experiments it would appear that stickleback alone caused the death directly or indirectly of 49 per cent. of the fry; birds, 57 per cent.; adult trout 64 per cent.; and all natural enemies combined 71 per cent.

Summarizing our results for the past four summers: In 1923, the loss of trout fry in southwestern Ontario was 96½ per cent.; in 1924 it was 98 per cent., same place; in 1925, it was 73 per cent.; and in 1926 it was 71 per cent. These two latter on Forbes brook, Prince Edward Island, Canada.

It is quite possible that a portion of the losses may be due to cannibalism among the fry themselves; but this would not alter the total losses as given above.

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THE NEED FOR DEFINITELY INDICATING NEW SYNONYMY AND NEW COMBINATIONS IN TAXONOMY

RECENTLY Dr. Schramm, of *Biological Abstracts*, requested me to serve as a member of a committee to advise the organization publishing *Biological Abstracts* in regard to a number of policies on indexing information from taxonomic papers. One of these questions dealt with the indexing of synonymy and another with the indexing of new combinations of generic and specific names.

It is very important that the working taxonomist should know when a given species is transferred from one genus to another, and it is equally important that he should know when a species name has been suppressed as a synonym of some previously described species. It is the aim of the founders of *Biological Abstracts* to furnish such essential information to students of taxonomy. They have found it very difficult to tell from many papers whether synonymy as indicated in the paper is new or has been previously recorded. They have also found it difficult to determine when species are transferred for the first time from one genus to another. This is especially true for papers dealing with taxonomic zoology.

It therefore seems advisable to present for the discussion of taxonomic zoologists the desirability of determining some way of indicating in their papers when new synonymy is proposed and when new combinations of generic and specific names are employed. In many of the recent extensive revisionary papers, long specific bibliographies have been given with no indications as to whether any of the synonymy is new. It is suggested that an easy way to overcome this would be to write in parentheses the words "new synonymy," or some abbreviation thereof, after each reference to a newly published synonym.

The labeling of new combinations or transfers of species from one genus to another forms a more decided digression from the practice commonly used by zoologists, and especially entomologists; but it is believed that if taxonomic workers would place the words "new combination," or some abbreviation thereof, in parentheses after each such transfer or new combination, it would greatly expedite the work of abstractors and catalogers, and to no small degree assist their colleagues.

Botanists have been much more careful and definite in indicating and cataloging all new combinations. I think it is time for the zoologists to take a lesson from the botanists and label their new combinations. It seems to me equally important that the botanists and zoologists agree to indicate in some clear manner all new synonymy.

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SURFACE TENSION METHODS

ATTENTION should be called to the misapplication of a quotation of Lenard in SCIENCE for March 18, 1927. Lenard states that the straight wire method, as a tearing off method, "as opposed to the ring method" (in Gegensatz zur Ring- oder gar Scheibform des Abreisskörpers) gives the accurate results to which Dr. du Noüy refers. Lenard by no means considers the ring method on equal terms with his own "tearing off method." Lenard's method is not entirely recent and was approved as a substitute for the ring method several years ago. (*Cf. Jour. Phys. Chem.* 1925, 897.)

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SCIENTIFIC BOOKS

The Fauna of British India, including Ceylon and Burma. Hirudinea. By W. A. HARDING and J. PERCY MOORE. London: Taylor and Francis, March, 1927.

THE new volume of the fauna of British India, devoted to leeches, is perhaps the most exhaustive and certainly one of the most interesting of the whole series. As there are only forty-six species to be discussed, it is possible in about three hundred pages to go into a great deal of detail about structure, habitat and relationship to human affairs. The editor, Sir Arthur E. Shipley, contributes a readable historical