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.