as a rule, especially when there is no trauma demonstrable in the peripheral organ, and a normal caloric reaction. The most noteworthy exception met with so far is damage to the seventh nerve. In these cases hearing returns but slowly and so far as we have observed not perfectly, even with a normal drum membrane, little if any signs of middle ear inflammation, and a caloric reaction present.

Radium in Diseases of the Ear.—HARRIS (*Tr. Am. Otol. Soc.*, vol. xiv, Part II) concludes, as a result of an extended investigation, that radium, up to the present time, has failed to be of any considerable benefit in the treatment of diseases of the ear. So far as chronic deafness is concerned it has proved virtually a failure. In the rare cases of intractable tinnitus and excessive vertigo, on the one hand, it can be employed with a reasonable hope of relief by its power of destroying the labyrinth. Finally, so far as malignant growths are concerned, it is of value when they are superficially seated. When deep seated there is nothing sufficiently encouraging to be said of it to warrant its use to the exclusion of operative measures when they can with propriety be adopted. The work that has already been done with it on the ear is not sufficient to condemn it *in toto*, however, and it is to be hoped that other investigators will take it up and give it further thorough and careful trial.

Some Observations on the Bárány Tests as Applied to Aviators.—BABCOCK (*Boston Med. and Surg. Jour.*, December, 1917) sums up the results of more than 1000 observations in the aviation tests for equilibration by means of the American modification of the Bárány chair, and a collaborative determination of the corresponding pulse rate, the summation of the latter, taken in 1000 cases, being as follows: Average pulse rate per minute before turning, 78; average pulse rate per minute after turning, 87; average pulse increase per minute, 9; lowest pulse rate per minute before turning, 58; highest pulse rate per minute before turning, 108; lowest pulse rate per minute after turning, 60; highest pulse rate per minute after turning, 124. In 80 cases the pulse rate increased after turning; in 12 cases there was no change; in 8 cases the pulse was lower after turning; the greatest increase was from 80 to 116, or 36; the greatest decrease was from 76 to 66, or 10; These findings cover a wide range of variation. Taking the general average it can be said that in 100 cases the stimulation to the vestibular portion of the eighth cranial nerve end-organ by fifty revolutions, at varying rates of speed, produced an increase in the rate of heart action of nine beats per minute. Taking the cases separately they may mean little or nothing. The responsiveness of the pulse rate to mental conditions probably accounts for the 8 cases which showed a lower rate after turning, due to the fact that some of the men approached these tests with considerable apprehension. In a very few cases an active reflex with the tenth cranial nerve has caused vomiting, especially after stimulation of the vertical canals. In no case has the candidate fainted, although when it is anticipated he is strapped in the chair.