that this book will obviously be used in regions far from the sea, another way of looking at it is to remember that the students will not be able to realize this, inasmuch as the author has stated in at least two places that such a book as this is supposed to provide a background in ecology for oceanography as well as for many other fields. Even closer to home, as far as the book itself is concerned, is the paucity of material concerning fresh-water environments. A lake is simply a wide place in a stream, and streams are mentioned much less frequently than Great Salt Lake. (The diagram of "important habitat types in North America" on page 48 omits streams entirely). On the other hand, the terrestrial aspects are well covered; the chapters on soil and climate are outstanding; and those on populations, geographic distribution, and the like are good workman-like jobs. There are many interesting illustrations, especially photographs of scenes in Utah. but the reiterated tree of life, modified to suit the discussion (in one place there are six versions of it in a row), becomes tiresome.

It might be best if those who decide to use this book think of it as "Principles of Terrestrial Ecology," and refer to a limnology textbook to fill out the details that they may need to understand that aspect of the transmontane environment, which is otherwise treated in such detail. Conversely, aquatic ecologists will find this a useful summary of matters unfamiliar to them. JOEL W. HEDGPETH

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The Origins of Psycho-Analysis. Letters to Wilhelm Fliess, drafts and notes: 1887–1902. Sigmund Freud. Marie Bonaparte, Anna Freud, and Ernst Kris, Eds. Trans. by Eric Mosbacher and James Strachey. Basic Books, New York, 1954. xi+486 pp. \$6.75.

The student and practitioner of psychoanalysis is provided with an opportunity to look behind the scenes and to get a fascinating intimate glimpse into the background of personalities and circumstances that led to its development. Skillful footnotes and introduction by Kris tie the content of the letters together and permit the reader to link thoughts and formulations with the corresponding well-known literature.

The less biased reader will also be impressed by the brilliant creativity of Freud's mind, but he cannot fail to notice the precarious scientific ground on which the whole edifice of psychoanalysis seems to be built.

When Breuer, who had introduced him to a new method of therapy, could not follow Freud's emphasis on sexuality in the etiology of the neuroses, Freud turned to the only contemporary who, like him, had accepted a pan-sexual theory of neurosis. Fliess became his "only audience," the two men uniting and fortifying each other against the rest of the scientific world. Kris does not see the attraction of the two men for each other as being based on their preoccupation with sex and on the similarity of their personalities.

Both are visionaries (in Freud's own words, p. 130). Both are fond of far-reaching speculations. Fliess is criticized by Kris for working on his theories "with an obstinacy and a lack of objectivity which ignored all inconsistencies and inconveniences" (p. 8), while Freud is praised for the "consistency which holds his objective in mind in spite of all difficulties and contradictions" (p. 26).

The critical reviewer of Freud's writings has always wondered how Freud could use "free association" as a method of investigation, not recognizing it merely as a method of therapy. This volume explains why the fallacious findings of his approach, leading twice to a near personal and scientific collapse in 1897 and 1900 (letters 69 and 130), did not stop Freud from continuing with the same clinical procedure. He developed his ideas first and then sought the clinical evidence, thus imposing his ideas upon his patients, as Fliess discovered after 15 years of closest friendship and collaboration (pp. 40, 344). The technique is little mentioned in the published letters, except in one "Draft J." Here the method of putting pressure upon the patient until his mind yields what Freud expects to find is clearly described.

Freud waited for his inner voice to reveal to him the deepest secrets of the human mind, a process that Kris calls a "surge forward from the preconscious" (p. 307), which "worked over scientific connections before they became conscious" (p. 230). This tendency to gain scientific insight from within himself was accentuated when Freud decided to get at the roots of his scientific errors by analyzing himself and his dreams —a curious way of scientific investigation, indeed.

The intimate revelations provided by this volume about the origins of psychoanalysis may facilitate the recognition of the pattern behind the unrealistic constructs of psychoanalysis.

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## Economic Geography. Clarence Fielden Jones and Gordon Gerald Darkenwald. Macmillan, New York, rev. ed., 1954. xxv + 612 pp. Illus. \$6.75.

Would you like to know about iron ore production by states and its movement to smelters? Or are you interested in rubber output in Malaya and Liberia? Clarence Jones and Gordon Darkenwald have provided 612 pages of encyclopedic yet meaningful data on man's utilization of the earth, illustrated by 442 maps and photographs.

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