who is devoted to trailless country and untrodden mountain ranges this might not ring true. One will agree with him that "you cannot get the Alps at second hand," that "the competitive element in modern life is one of the very things men go to the Alps to forget," and that "the treasure of the Alps is inexhaustible," but this is true of mountains everywhere.

Mr. Irving's hope, expressed in his author's note, that his book will help the average person to want to spend his holiday in the Alps ought to be fulfilled for, as he says, "The Alps can give to the young who climb them and the old who look at them the knowledge of the things which belong unto their peace."

F. H. W.

Time Exposure, by William Henry Jackson. 8 vo., 341 pages, with illustrations. New York: G. P. Putnam's Sons, 1940. Price $3.50.

To compress the biography of an active life into print in the ratio of one year of life to 3.5 pages of type is a problem that would tax the resourcefulness of many men writing their own biography in their forties, but when a man of ninety-seven tackles it, with the crystal clear recollections of such diverse situations as a family kitchen scene at the age of six, his first pay job in upstate New York in the fifties, the Civil War, Fort Kearney and Julesburg, Salt Lake City and Los Angeles in the sixties, the Yellowstone and the Wind River region in the seventies, Colorado in the eighties, the Far East in the nineties, all through a life that sought to record for others glimpses of every conceivable feature of the times, and all by a man who, by the standards of modern industry, would have been past his age of usefulness fifty years ago (Jackson was ninety-seven when he wrote this), let no one criticize any seeming distortion of the relative importance of one episode over another, or the occasional series of years, blotted out, as it were, by some dark nebula, of which no mention is made in the biography.

With an obvious gift for drawing, Jackson's first job by chance gave him the opportunity to paint window display material, as we say in chain store parlance, and all through his life, even in his nineties, he did murals. That ability to draw or to paint stood him in good stead. His real vocation, from which he earned his living, was photography, but one cannot doubt that his under-

standing of perspective and balance in painting had perhaps as much bearing on the success of his photography as did his painstaking care and inventiveness in sensitizing and developing his "wet process" plates under most adverse conditions. Those readers who may have tried developing the early Lumiere autochrome plates when even with good dark room facilities, a mistake of a few degrees in the temperature of the water would "curl" the emulsion, will understand to what infinite trouble Jackson must have gone in first sensitizing, then exposing while still wet, then developing, not a little 4 x 5 plate, but glass plates up to 20 x 24—and think of the water he had to use in the alkali country, and the dark room improvised onto a buggy.

Just as Jackson comments himself, the years 1870-1878, when he worked as a photographer under Hayden, on the U. S. Geological survey, chiefly in the Wind River and Teton and Yellowstone districts, will undoubtedly make for his lasting fame, and it is through his achievements in those years that the American Alpine Club is glad to count Mr. Jackson as a member. Associated with the well-known painter Thomas Moran, on some of the surveys, he obtained a remarkable record of the scenery of the Wyoming and Colorado country. His Yellowstone pictures are reputed to have been the proof which persuaded Congress to create the Yellowstone National Park—a park of which the brother of President Rogers of the American Alpine Club is now superintendent, a curious coincidence.

This same month the writer has had occasion to read the biography of Prof. Marsh, the eminent Yale paleontologist, whose life work was tied to the collecting of fossil vertebrates in this same country, and largely by cooperation with the same Dr. Hayden, and the fact that neither Marsh nor Jackson, both close friends of Hayden, ever mentions the other, although the work of each was necessarily, to a great extent, interlocked with the work of the other, is an interesting sidelight on the vastness of the survey projects of those days.

The book is well illustrated, easily read, holds one's attention from cover to cover and is completely non-technical, and again one cannot help taking off one's hat to such a product—of a man ninety-seven.