The list would be far too long. At the close of the war over a hundred psychologists had received or were about to receive commissions in the army; many more were doing work equal in merit to that done by the men commissioned; many were fulfilling the regular duties of teaching and devoting to war work the time previously given to scholarship, research and personal affairs; many more were carrying the extra burdens of regular work due to the more direct national service of others. If there were any differences in sacrifice or in achievement, they may well be left hidden in the more important fact that the psychologists of America worked to help win the war and worked together.

E. L. THORNDIKE

PUMPELLY'S REMINISCENCES[1]

PHYSICISTS and farmers are agreed that after the cider has been squeezed out, what remains of two apples can be contained in less than the volume of one. So it is with these "Reminiscences": by squeezing out the rich juice of the narrative, as some impatient and matter-of-fact man of the street might advise, the remains of the two large volumes could be reduced to a single small one; but how disappointed that compressed record, with every story dried to mere pomace, would have left the lingering reader! The detailed narratives of deliberate pages like these are not only of deep interest to many sympathetic contemporaries of the author, but of immense value to their studious successors; for the well-filled books reveal the deeper meaning that lies behind a mere chronicle of events and dates. Would that more of our eminent men might employ the leisure of their later years—if perchance their later years are spent in leisure—in writing out their memories, for the enjoyment of their younger friends and the edification of posterity. Yet with respect to the Reminiscences before us, posterity should be warned not to take them as the record of an average geologist of our times; for while all notable men are of their own pattern, Pumpelly's life has been the very extreme of individuality. Furthermore, contemporary parents of boys who gather minerals and fossils should, in spite of the disregard of America's leading educator's advice shown by our protagonist in the training of Raphael junior, beware of letting their sons embark upon an erratic education of the kind here set forth, in the hope that they will repeat the extraordinary career to which it led; unless they miraculously possess a Pumpellian heart, head and body—a pure and guileless heart, a clear and sagacious head, and a strong and courageous body; and of that rare endowment our sons have not one chance in many thousands.

Aldrich's "Bad Boy" was a little chocolate saint along side of young Raphael in his native New York town of Owego about the middle of the last century, where his piratical adventures, after reaching the high level of a stabbing affray in a quarrel over the division of booty among the members of the gang, were cut short by a wise mother's appeal to family pride, clinched by a more corporeal argument. A few years later a daring climb up the cliff of West Rock at New Haven, where the lad was attending a preparatory school, ought alone to have qualified him for admission to the geological course at Yale, had he not soon afterwards, on reaching the responsible age of seventeen, suddenly decided to forego the advantages there offered and, improving vastly on his grandfather's trite device of entering upon a life of adventure by running away to sea, announced to a well-selected one of his two parents that he wished to study in Germany. She, after the manner of her tactful kind, presented the proposition to her husband, who, after the fashion that has prevailed with men in his difficult position since the days of Eden, assented; and in 1854 mother and son crossed the Atlantic in a sailing vessel to Hamburg.

Hanover was selected as a first station of educational progress, and there two professors were promptly chosen; one was a riding

[1] *My Reminiscences.* By RAPHAEL PUMPELLY. New York, Henry Holt and Co. 1918. With illustrations and maps. Two vols., 844 pages, numbered consecutively.

master, the other a fencing master. Under the latter the young man became so mighty with the "palash" that he wounded to the death a young English opponent; whereupon, instead of vaingloriously seeking more victims, he gave up fencing. His foreign professors included, besides the two "Ordentliche" above named, two "Ausserordentliche" in the persons of a landlady's daughters, who gave lessons in German, cards and dancing, with well conducted practical exercises. The youthful Raphael also met von Roemer and was shown his fossils; and he saw something of the Hanover Polytechnic students, of whom the most capacious exceeded four fold and more the untrained young America's modest maximum of twenty Schoppen at a sitting; but a single season of such carousing was his first and last; its excesses had no attraction for him. Indeed, in this and other lines his education seems to have been conducted on a strictly experimental basis and to have led to wise conclusions: proficiency was repeatedly reached in one art or another, but if the acquired art proved undesirable it was given up and another was tried. The young man therefore had all manner of adventures, pleasant and unpleasant; things were always happening to him. He tramped along the Rhine, collecting rocks and minerals; he rode over the Taunus hills with a fair American companion; he secretly pawned his mother's watch to a Jew at Marburg to get money for railway fares; and he tried his luck on the gambling tables at Wiesbaden. Then after a summer trip in Switzerland, of which little is told, mother and son went to Paris for the winter; manifestly his European education was becoming cosmopolitan.

The French capital proved attractive in various directions. Soon after arriving there, research led him to pick up a fine two-inch Brazilian topaz for a couple of francs from a dealer on the quais. The youth always had the luck with him. A little later he declined the cajoleries of a beauteous and tearful actress, and made instead a lasting friendship with an octagenarian baroness. Truly in friendship-making he had a magnificent and enviable capacity, and always chose from among the best: but the nonchalance of his daily doings was also magnificent, and is equalled only by the naïveté of the narrative in which the daily doings are recorded.

From Paris he went to Italy, still accompanied by the faithful mother, whose apron strings were slow to untie, whichever way he pulled them. At Naples, it came over him that he was not securing the education for which he had crossed the ocean—but on this point we venture to disagree. He climbed Vesuvius and gathered its minerals; he exhausted the family letter of credit, but soon prevailed upon a discriminating banker to advance needed funds; he went to Rome and had an interview with the Pope; and then to Florence. There waking one morning with a wish to wander forth in search of new educational experience, he took leave of his mother for a day or two and set out for Leghorn, with a letter of credit in his pocket for baggage. By the merest chance he went from Leghorn to Corsica, where he spent four months like a knight-errant in the Middle Ages; first enjoying an idyll—platonic—with a forester's young French wife, who sang to him of spring and youth; then roving over the wild mountains with shepherds and bandits galore; meanwhile keenly using his eyes and writing a few explanatory letters to his mother, which the trusty mountaineers failed to post.

Finally returning to Italy, as thoughtless as Theseus though with no Ariadne, he found his distressed parent, who instead of classically leaping from the Leghorn rocks, had as fruitlessly set the police looking for her lost boy all over Europe. She embraced but did not upbraid him, and the happy pair went to Vienna, where education was again taken under consideration; and from Vienna, on the advice of the osculatory old Noeggerath, the youth of nineteen went to Freiberg, with the beginnings of a beard that became famous in later life. On the way there at Dresden the apron strings were at last untied; the mother turned homeward alone and the son turned seriously to his studies—at least as seriously as any one studied in the Freiberg of that

time. But Corsica had charmed him; he revisited that romantic isle the following summer, and this time carried back the famous Mouflon, hero of great adventures, the telling of which in print to the invisible public can not, however, compare with the oral recital, not many years after the event, to a group of admiring boys around a camp fire in the woods of upper Michigan.

Let no one imagine that a glance over these selected items can replace the reading of the delightful autobiography which they introduce. What is here too briefly told is only a curtain raiser to the kaleidoscopic life led by this fascinating boy after he reached manhood. No abstract can do justice to his thrilling adventures as a mining engineer in Arizona—amazing revelations of the conditions that existed when there really was a western frontier; had Beadle, a famout littérateur of that time, known them, they would have made him despair over the poverty of his dime-novel inventions. Mining and smelting in Arizona were followed by geological explorations in Japan and China; it was in that epoch that our hero during a smallpox delirium, playfully fired his revolver, which had been, Arizona-fashion, left handy under the mattress, at his Chinese nurse, who thereupon selfishly resigned his post. The winter journey homeward across Siberia in a sleigh, during which, as a chapter-heading might put it, "A whiff of cigarette smoke passes the time o'day," is not likely to be repeated by the modern traveler, who finds even the Trans-Baikal express too slow. Then came a period of conventional life in New York where some commonplace years were passed; and this was followed by a humdrum engagement as professor of mining at Harvard; but very little did the professorial Pumpelly of those days resemble the customary philosopher plodding across the Common to a lecture, or the expectable mathematician trudging through the Delta after a faculty meeting. Indeed, it was credibly reported at the time that a street-urchin—a "mucker" in the slang of Harvard Square—on seeing this strange apparition in felt hat, long flowing beard, velveteen suit and riding boots, cantering along Kirkland Street, stopped in astonishment, exclaiming: "Golly, what a swell!"

Naturally enough the cantering gait, which so well suited the apparition, soon carried him out of Cambridge and into all parts of the country, as mining engineer, state geologist, director of the Northern Transcontinental Survey, and otherwise; until in 1903–04 he welcomed the approach of old age by conducting a rare journey of exploration, a Carnegie-Institution search for primitive man, into central Asia. Ten years later an excursion was made to Arizona: in the shadow of the loss of wife and mother, the father with son and daughters, who left their own children at home to make themselves boy and girls again, visited the frontier of 1860, where desperados then dwelt and where railroads, hotels and automobiles now flourish locally in the wide arid spaces. "Incidents" occurred of course, such as the near-loss of a toe, and a possible death from thirst in a dry stream bed; but these little affairs did not prevent a deep appreciation of the great empty wilderness with its glaring days of vast distances, and its calm nights below the starlit vault of the cloudless heavens. And from the desert the septuagenarian, once the boy pirate of Owego, the knight errant of Corsica, the student of Freiberg, the Arizona miner, the traveler in the Far East, the expert geological surveyor, the archeological explorer, all reaching their culmination in the genial grandfather, returned to his home in Newport to write his "Reminiscences." There his friends now find him in beautiful serenity. There the good wishes of many greatful readers attend him.

W. M. D.

PROFESSOR WILLIAMS AT YALE[1]

CORNELL and Yale are singularly linked in the life of Henry Shaler Williams. Professor Williams was born at Ithaca, graduated from Yale, then returned to Ithaca to teach at

[1] Address by Herbert E. Gregory, representing Yale University at the exercises in memory of Henry Shaler Williams, held at Sage Chapel, Cornell University, October 20, 1918.