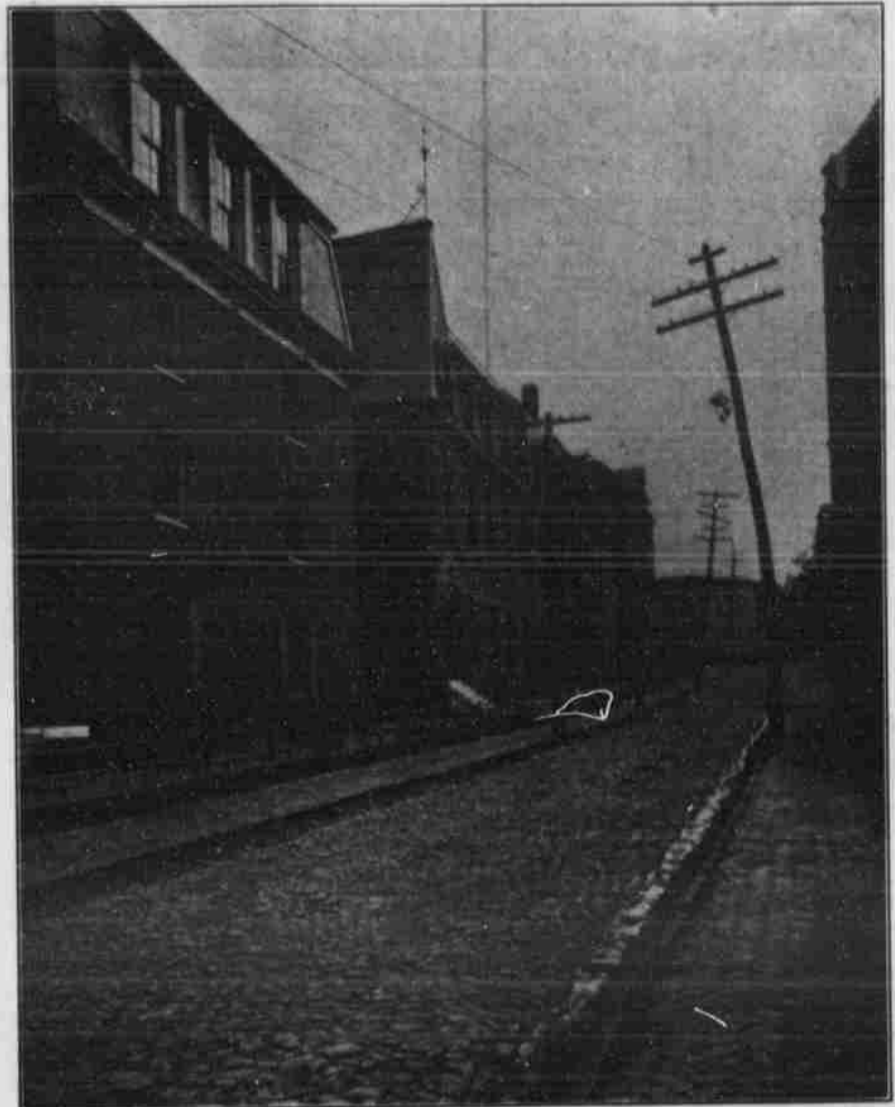


Present Conditions at Johns Hopkins University



CARROLL MANSION—OFFERED TO JOHNS HOPKINS AS A NEW SITE.



ADMINISTRATION BUILDING AND SOME OF THE LABORATORIES OF JOHNS HOPKINS.

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RUMORS of an approaching quarter-centennial celebration at Johns Hopkins university determined me to go and see what manner of place it might be. That it was a post-graduate institution I knew and that it was preposterously learned. But there my information ended. Therefore, I and my good friend, Thomasina—best of traveling companions—betook ourselves to Baltimore. Our first walk brought us inevitably to Monument Square, center and soul of the venerable city's life. Strolling up Monument street in search of an approachable person to direct us to the university, we came to the conclusion that nine-tenths of Baltimore's population were men and that nine-tenths of Baltimore's men were young. Not a petticoat appeared.

It was Thomasina, of course, who, wearing her second-best smile, accosted a youth in a doorway with "I beg pardon, but can you direct us to Johns Hopkins?"

"Ladies," he replied, his eyes twinkling irrepressibly as he lifted his hat, "you're right in it."

"What—where?" gasped Thomasina, wheeling to look about her. Big, dull, red brick buildings with round, brownstone arches, stood flush with the sidewalk on both sides of the street. The youth indicated these and including vaguely all points of the compass, replied: "Oh, all about here. Were you looking for anything in particular?"

"We were looking for a university," quoth Thomasina with reproachful emphasis. "We thought these were the Young Men's Christian association. Where is your campus? Where are your dormitories? Where are your Greek Letter societies?"

"Well," he said slowly, "the campus used to be at Clifton, about two miles northeast of here. There isn't any more. There aren't any Greek Letter societies."

Thomasina shrugged her shoulders with a what-do-you-mean-by-it expression. "How do you know your buildings apart?" she demanded.

"We don't," said the young man imperturbably, "except by situation." Here-with he pulled out and handed to Thomasina a pocket university directory, bowed and went his way.

"Gracious!" gasped Thomasina with a shiver; "to think of stumbling into Johns Hopkins without knowing it! Let's get right out of this university."

More easily said than done. We tried Garden street and Ross street, only to encounter windows lined with rows of bottles, with male heads bent over them. Howard street and little Ross street were still collegiate. "The idea," sniffed Thomasina, "of a university all tangled up with a city in this unprincipled fashion! Where are the immemorial elms, the antiquity—the atmosphere?"

"Antiquity in an institution just celebrating its twenty-fifth anniversary? Nonsense!" I protested. "As for atmosphere, if you should step inside that chemical laboratory you would find plenty of it." I was wrong, for approved ventilating hoods and flues have made Johns Hopkins' chemical laboratory the least sulphurous in Christendom. But how was I to know that?

Arrived in our peregrinations at the door of McCoy hall, we went in under the carved Romanesque archway, to the office of the president. Having held the chair of chemistry ever since the university opened, Dr. Remsen has not relinquished it even now when the whole burden of the institution has fallen on his efficient shoulders. But you never would have fancied him a busy man as he settled down to consider

our case. He suggested that we make the grand tour of the buildings, seeing Johns Hopkins with our own eyes. So, provided with a sheaf of cards of introduction, we were bowing ourselves out, when Thomasina, hitherto becomingly silent, raised her voice. "I believe," she said distinctly, "that your most distinguished product is Richard Harding Davis."

The president strangled a smile, murmuring something courteous about the "point of view." I bolted into the passage to hide my confusion. Richard Harding Davis indeed! Shades of Johns Hopkins!

The charge of the architectural barrenness we retraced in the shining oaken corridors of McCoy hall, newest and finest of university buildings. We caught a glimpse en route of the leonine head of Prof. Paul Haupt of Polychrome bible fame. Thomasina said she never had supposed he was real. Through literature and language "seminaries," big audience halls, and splendid reading rooms, we prowled, and so came again to the street, and over the way, to the Chemical laboratory.

The professor who showed us through said it was not a show laboratory; and perhaps from the standpoint of pure beauty it was not. But light, air, working space, water power, and electricity were unstinted. As for apparatus they have everything that's to be bought, and also some that isn't for the machine shops are by no means the least important part of the university.

Thomasina, whose idea of chemical experiments was confined to brief operations, ending in a pop and a mess, was overawed by the scope and seriousness of the work going on in dozens of little private laboratories, where graduate students were industriously transforming themselves into Ph. Ds. The infinite patience which keeps a man pegging away for a twelve-month upon one circumscribed investigation, with the chance that in the end they may write over against his work, "Results purely negative"—was beyond her ken. I am afraid she joggled out of a half hour's work a Ph. D., who doing delicate chemical weighing, determining thousandths of a gram with the help of a beautiful balance and little fish-scales for weights which would be disqualified for immediate use by the moisture of your finger-tip. He gravely took the temperature and consulted the barometer before he went to work, proceedings which we were inclined to regard as a huge joke. But it seems he meant it, there being a difference between culinary and chemical standards of exactness. Our guide told us that many a time when he had important experiments in hand he had worked with the balances through the dead of night, till the clock, striking four, set in motion again the rumbling city carts, sending disconcerting vibrations through his delicate instrument, and putting a period to exact work. That's the price Johns Hopkins pays for her city site.

We said we would like to see some practical results of so much pure science and to know what becomes of the pure scientists turned out by Johns Hopkins every year. In response they showed us a series of books full of samples of beautiful rainbow-hued cloth. Those colors, or rather the dyes which make them, they said, are the result of the sweat of the chemists' brains. They mean the most abstruse mental operations, the most strenuous juggling with the relative geometric positions of unthinkable atoms in space. The big German dyers have in their employ dozens of illustrious doctors of philosophy who think in colors, determining by their machinations with coal tar the hues in which society shall array itself from generation to generation. That is one of the many commercial fields open to the theoretical chemist. Most Johns Hopkins men, however, go to satisfy the demands

for "Hopkins graduates as professors in the colleges and universities of the land."

We found the geological laboratory mixed up confusingly with the weather bureau and the Maryland geological survey. That is because Dr. Clark, director of the laboratory, is also clerk of the weather and chief of the survey. Advantage in plenty accrues both to university and state from this partnership. The students get between three and four months of actual field work every year and earn a little money. The state, on its side, gets the unpaid labor all winter of a body of thirty or forty trained men. The university values the relation, too, for the close touch it gives with the people. Geological hunting parties scrape acquaintance with the farm folk, and the department's function as identifier of "specimens" brings them into relation to all sorts and conditions of men.

Wonder tales came true inside the physical laboratory. We saw a solitary worker spinning crystal thread finer than the most attenuated cobweb. Fusing two bits of quartz in a Bunsen flame, he suddenly drew them apart. Holding the delicate thread, spun between the crystals, in the flame, he blew it across the room. The filament, scarcely visible, was not fine enough to suit the student, so he fastened one end of it to a little arrow, fitted it to a bow and shot it at a target. Capturing the delicate thing, so fine that it now floated in air, he made it fast to a glass frame and scrutinized it critically against the light. Behold, there were flaws in the filament and he began all over again. He wanted it to suspend a delicate weight in a very particular piece of apparatus. It must be fine enough, long enough, strong enough and totally without inequalities. We left him still juggling.

Down stairs they took us into the dark-room where Dr. Rowland, who has recently died, made his marvelous photographic map of the spectrum. A whole year he spent in testing preparations of photographic plates, before ever the work of making negatives was begun; three years it took him to complete the series of maps, the most exact in existence. Thomasina was beginning to look distinctly bored, when the professor put into her hand a little three-inch box, telling her to open it. She did, and almost dropped it in her surprise. The little box contained a sublimated rainbow, as pure and as melting as the veritable "bow in the sky" and infinitely brighter. It was one of Dr. Rowland's famous diffraction gratings—shame to call so beautiful a thing by so unbeautiful a name! Nowhere save at Johns Hopkins are these perfect gratings made; for nowhere else in the world are there instruments exact enough to make them. A grating is a polished concave square of tin and lead alloy, scored with absolutely parallel scratches, absolutely the same distance apart, and 20,000 of them to the inch. A slip of one-millionth of an inch, and there are "ghosts" in the spectrum—the grating is worthless.

Thomasina, holding the blaze of color in her hand, said she thought she would take one. "Certainly," said the professor gravely, "have you a \$100 about you? The university sells them at cost price."

We gasped, and the professor hastened to explain that while Prof. Rowland succeeded in making a perfect screw for the ruling engine, it is still difficult to get diamond points the right shape to do the scratching. So there are still many spoiled gratings, and good ones come high. We wanted to see the wonderful machine at work. The professor hesitated. It seems the thing is so delicate that it is kept in a vault at constant temperature. The admission of our little vital furnaces might raise the thermometer and spoil a grating. However, just for a second, he let us in. There was the machine, working under

glass. A thousand-toothed wheel revolves one cog; the screw turns a fraction of a revolution, carrying the polished metal which is to be a grating forward an imperceptible bit; the diamond point passes over it, leaving a scratch. So on, until, if no accident befalls the diamond point, a perfect grating is brought forth.

Everybody said we must see the Medical school, so one fine day we made the trip to East Baltimore to Johns Hopkins hospital and the medical laboratories. They are very proud of their medical school, partly because it is still so new that the other institutions of the land haven't had time to copy it. In other matters of research they have set the pace for the whole country, and now their imitators are saying, "Why are not we as good as Johns Hopkins?" But the Medical school, with its requirement of a college diploma for admission, is still head and shoulders above competition. Harvard, indeed, has this year followed suit. The rest are yet to follow. Besides the obvious advantage of its post-graduate requirements, Johns Hopkins' Medical school is blessed in the unusual relation it bears to Johns Hopkins' hospital. Although on separate foundations, the institutions are practically one. Two of the laboratories are on the hospital grounds. The superintendent of the hospital and many of the staff are members of the medical faculty. Students work in the wards, attend clinics, serve in the dispensary. Practically all the instruction of the fourth year, and much of that in the third, is given in the hospital. Woman is permitted to squeeze inside the medical school, because the endowment of the Woman's Memorial building was made on those terms.

So much for the visible Johns Hopkins. I cannot close without speaking of less concrete things. In its twenty-five years of existence Johns Hopkins has by its insistence and original research changed the very complexion of American university education. Its press has maintained nearly a dozen technical journals of the highest type. As it stands looking into its second-quarter-century, there is hope that it may soon change its adequate, but unmonumental housing for an architectural setting worthy of it. Mr. Wyman of Baltimore stands ready to give the university a magnificent site on Peabody Heights, if only \$1,000,000 can be raised to go with his gift. The money is a little slow coming, but it will surely come. And when the university is built there will be no mistakes. Johns Hopkins has built its present shell, layer by layer; it knows precisely what it wants and how to get it. It will not expand its undergraduate department. The authorities have no wish to see the serious graduate student body swamped into a horde of irresponsible, prank-playing undergraduates. They prefer rather to smother the spirits of the undergraduate in academic gloom. They will, it is safe to predict, indulge again in scientific expeditions like those to the West Indies, which have been intermitted for lack of funds; they will add to the university extension courses; will make Johns Hopkins more than ever superlatively the place in all America for original research. They told us that they are always loaning to other institutions volumes of the rare old technical journals of which they have complete sets. We asked if there was not danger of losing them. "But," said they, reproachfully,

"there is more danger that somebody won't get what he wants." That is Johns Hopkins all over. Given a really adequate endowment, and along lines of research at least, everybody will always "get what he wants."
 MARY BRONSON HARTT.

Pointed Paragraphs

Chicago News: Youth has ideals; old age has ideas.
 A man on top of the wheel doesn't care for a turn.
 A girl's love for pickles doesn't necessarily sour her disposition.
 Woman grows old about as gracefully as she climbs out of a hammock.
 Few rich men with poor relations believe in the art of healing by touch.
 Repartee either makes a man's reputation or causes him to lose his job.
 For some unaccountable reason the amateur vocalist never loses his voice.
 Compositors must be jolly good fellows, for they are always setting 'em up.
 With her first engagement ring a girl imagines life for her has just begun.
 When a man starts for a dentist's office he usually strikes a tooth-burly gait.
 A young man may be as bright as a dollar, but some girls would rather have the dollar.
 If the average man knew what was best for him there would be less said about blessings in disguise.
 When a man's life is in danger and he lives to tell the tale he generally tells it in after years on the least provocation.
 Only the unexpected interests us. History records the race won by the easy-going tortoise, but says never a word about the many previous races won by the hare.

Liberties with the King

The authorities have refused to copyright a Scotch whisky label that bears in large, staring letters "King Edward VII," relates the Cleveland Plain Dealer. They claim that the names of living people are their own property and that other people have no right to demand a proprietary interest in them. They also suggest that it would be well for whisky men to get King Edward's consent before taking any such liberty as the one proposed. But who expects that the king will consent to this use of his name? He would be foolish if he did.

Just picture a line of thirsty men arranged along a bar.
 "Fill your glasses, gentlemen," says the man who buys, and they solemnly pass the bottle of "King Edward VII" along the line. "A toast, gentlemen. Up with your glasses. Are you ready? Then down with the king."
 And they solemnly down him.

His Profession

Baltimore American: "Please, sir," began the beggar, "would you give a poor man a dime? I can't get work at my trade, and—" "Why," stormed the prosperous-looking pedestrian, "I just gave you a dime at the other corner! What is your trade, anyway?" "I know you gave me that dime, sir," said the beggar, "but you see I am a re-toucher by profession."