a most unfit building in the centre of Berlin, known as the "Arbeitshaus," or Workhouse. The condition of those suffering from recent insanity is not better, for these are congregated in the wards of one section of the General Hospital of La Charité, having besides the patients afflicted with syphilis placed in other wards of the same section of this city institution. It is to be hoped now that the chronic cases are in the way of getting proper attention, that the acute cases will also have their claim to humane and proper treatment efficiently attended to.

Dr. Paget on the Study of Natural Science as a branch of higher education.

"The *general* question, whether the study of natural science should become an established part of the education of the higher classes, is a subject of such interest as to need no apology for its introduction before any audience, and least of all before you. It is not only one of the great educational questions of the day, but a question, in the right solution of which no class is more interested than is our profession. I confess that, to me, it seems high time to consider whether natural science might not be useful as part of a liberal education, when an author of great distinction and undoubted learning—one whose writings have been rewarded with the applause of the educated world and with some of the highest dignities in the gift of the Crown—states as a "well-attested fact, that a man's body is lighter when he is awake than sleeping; a fact" (he says) "which every nurse who has carried a child would be able to attest;" and concludes from these *well-attested facts* that "the human consciousness, as an inner centre, works as an opposing force to the attraction of the earth." I quote from a *seventh* edition, *revised*. To my mind, the *necessity* for more general instruction in natural science needs no further proof, when ladies and gentlemen appear in a court of law to vouch their belief in the supernatural powers of a crystal globe; when those who are called highly educated throng the necromancer's consulting room to hear disembodied spirits rap on his table; when they daily become the dupes of barefaced quackeries; and, while avowing their belief in what is absurd or even impossible, plume themselves on their superiority to prejudice, regard themselves with complacency as walking in the spirit of the age—as being *au courant* with its progress—and class with the persecutors of Galileo any who question the accuracy of their facts or the logic of their conclusions. Whatever may be thought of the enlightenment of the present age, there can be no doubt of the readiness and boldness with which it forms or avows its opinions. Far be it from me to question the birthright of an

Englishman to judge of all matters, whether he understands them or not. The right of private judgment is the most precious of civil rights; but it *may* occasionally make fools of us, when exercised upon questions in which we are uninstructed. Even freedom of thought is not an unmixed good. It stirs a community in *all* directions—not always in the direction of progress. In the unwise and presumptuous it is often the parent of mischievous errors, that find ready acceptance among the ignorant and indolent, and cost for their removal much time and trouble of wiser men. It is easier to refute errors than to remove them. Ignorance must be instructed, self-sufficiency must become modest before it can be convinced.

"I have sometimes fancied that the rapid succession of brilliant discoveries and inventions which has characterised the present age, and should have enlightened it, has actually enhanced its credulity for the pretensions of quackery and imposture; that the unexpected and unimagined achievements of true science have so dazzled the minds of people as to render them more accessible to other marvels, whether true or false, and more ready to yield unquestioning belief in *whatever* is new and wonderful: as, in times of old, the heroic deeds of a Hercules or King Arthur led their admiring countrymen to ascribe to them other achievements, not only unreal, but impossible.

"Or as, in the sixteenth century, when men's minds had been roused and agitated by the spiritual preaching of the Protestant Reformers, a readier credence was given, not to spiritual *truths* only, but also to spiritual and mystical *errors*. Then was the time when enthusiasts abounded, whose imagination called up before their eyes every object they desired to see; then it was that astrology was the most widely spread and most generally studied as a useful science; then it was that demons were classified, and that witches were burnt in thousands. *Then*, even self-reliant intellects that had thrown off the yoke of ancient beliefs, yielded a ready credence to almost anything which had a spiritual semblance. Melancthon was one of the chief defenders of astrology. Luther attributed diseases to the immediate agency of the devil, and was indignant with the physicians who referred them to natural causes. Paracelsus and Cardan, while shaking the popular faith in ancient physic, rested their own on cabalism and astrology. In the old city of Aberdeen sorcery had lain undiscovered, though the holy clerks of King's College had been there for a hundred years, ready at any time to have exorcised it with bell, book, and candle; but in the fourth year after the founding of Marischal College and the spiritual teaching of its Protestant professors, twenty-four witches were burnt alive for dancing with the devil around the market cross.

"As the minds of men in those days, when awakened to new and deep spiritual convictions, were opened also to mystical *errors;*

—so in the present day, when startled with scientific wonders beyond their comprehension, do they gape at and swallow indiscriminately everything new that is presented to them under the outward guise of science:—and this, while they are disposed rather to scepticism than credulity in matters of ancient belief. Truth, it has often been said, is stranger than fiction. They that use the proverb have, commonly, in view only the events of history or of social life. But it is equally true, if we compare the established facts of science with the pretended facts of fraud or quackery. If you tell an uninstructed person that you can talk easily and fluently with a friend a thousand miles off, can write to him at that distance in letter or in cypher, whichever he prefers, and that all the help you need is in some pieces of zinc and copper and some acid and a long piece of wire, and a thing somewhat like the face and hands of a clock: and then tell him, that by merely resting your fingers on a table, you can make it turn round and stand on one leg, and then move of itself about the room: both things may seem to him very strange, very wonder-moving; but surely the truth here must seem stranger than the fiction: to an uninstructed person table-turning must seem at least as credible as electric telegraphy. Or, again, if you were to tell him that there are rays of light which give no light, that, when separated from other rays and admitted into a darkened room, they cannot be seen, they give no light, and the room remains dark as before; and yet that Professor Stokes has made them visible, has made these dark rays shine and give light in the room, merely by intercepting them with a solution of a salt of quinine contained in an ordinary glass:—and if, then, an advocate of homœopathy were to expound to the same hearer his views of the action of medicines:—surely the dogmas of Hahnemann (unproved and unsound as we know them to be) may seem to the uninstructed person no more strange or incredible than what you had told him about the rays of light, though the latter be well-assured facts, that can be verified at any moment, and are in harmony with the whole body of optical science.

"It is plain that by no instinct, no common sense, no natural power, can any man discern between truth and untruth in these matters: to the uninstructed in sciences of observation the truth must seem stranger, less credible than the fiction. It is to this want of special scientific instruction that we must ascribe the popularity of error. For it must be admitted, that they who believe the fictions are not all, in a general sense, fools: there are among them prudent statesmen, astute lawyers, faithful ministers, discreet housewives, such as in their several callings we might be content to take as our guides. And yet, because of their want of scientific training, their want of that knowledge which would tell them what it takes to establish a real fact in science, they are unable to distinguish truth from its counterfeit, or to gainsay the pretensions

of quackery and imposture. How, then, can people be guided to a better judgment in these things? Chiefly by being themselves in some measure instructed in some of the sciences of observation; and then by being taught that, in such things as I have put in contrast, the one set of statements are, and the other are not, founded on careful, repeated, various inquiries by men of special training; that the one set are, and the other set are not, provable by every test to the satisfaction of all who will look on and who are too acute to be deceived; and, finally, that the truths are, and the fictions are not, parts of a system or whole body of sciences. It is this—the value and weight of a body of science—that uneducated people cannot understand. They may perhaps form some judgment whether the reasons advanced for any new view be in themselves good or bad, but they cannot estimate the kind or amount of evidence necessary to establish its truth; nor can they appreciate the objections to it. They know not the multitude of well-assured facts which make up the body of true science, and each of which must be a standing argument against the admission of any new view that is at variance with them. To persons versed in science, this objection in its aggregate is well nigh conclusive. We may, in short, safely assert, that whatever cannot bear the test of other scientific inquiry, whatever cannot be incorporated with other knowledge, is probably not true.

"These, unfortunately, are tests which they who are uninstructed in science cannot apply for themselves; and, as this class must always remain a large one, we may be sure that quackery and credulity, fraud and folly, will never cease while the world lasts. They are evils that can never be wholly removed. Yet, assuredly, they may be mitigated. If some portion of the natural sciences, and in particular those which treat of the laws of life, should become an established part of the higher general education—of the education, not of medical students only, but of every English gentleman, we may expect that society will, in course of time, become more conversant with the kind of knowledge required for distinguishing between true science and its counterfeit. We may reasonably look forward to this improvement, if the universities of Oxford and Cambridge go onwards in the course they have taken of late years, and do not rest until no one shall be called well educated who has not been trained in the knowledge of some natural science. I say expressly *some* natural science; for he that has studied even one, and has learned with what temper it must be pursued, with what labour it has been set up, with what evidence every new doctrine in it must be supported, and how that evidence must be able to bear a jealous cross-examination,—he, I say, that has learned this in any one natural science, will not lightly adopt spurious imitations of facts in any other."—*'The President's Address, at the Thirty-second Annual*

Meeting of the British Medical Association, held in Cambridge, August, 1864.'—By GEORGE E. PAGET, M.D., F.R.C.P., Member of General Medical Council; Member of Council of Senate, University, Cambridge.

The Plea of Insanity.

The Capital Punishment Commissioners met on Friday and Saturday, the 10th and 11th instant, at No. 2, Victoria Street, Westminster, when Dr. Hood, one of the Lord Chancellor's Visitors in Lunacy, and Dr. Harrington Tuke were examined before the Committee in especial reference to the plea of insanity in criminal cases. —*The Lancet, March* 18*th.*

The Asylum Case Book.

Of the duties of the medical officer in an asylum, that of keeping the Case Book is not the least important, nor one whose performance affords him much satisfaction. A book containing within the compass of a single volume, or of one for each sex, complete records of all the cases actually under treatment, is probably a desideratum in most asylums. The prevailing plan of filling up successive books with more or less fragmentary accounts has many and constantly increasing inconveniences, and if a patient live many years in an asylum, the history of his case may ultimately have to be sought in detached notes, scattered through ten or twenty books. A striking illustration of this recently occurred in one large asylum where, on the occasion of an official visit, a view of the Case Book being requested, a small cartload of bulky volumes was placed before the dismayed visitors.

In addition to the inconvenience arising from the history of a single case being recorded in numerous detached notes in an indefinite number of books there is a more serious disadvantage in the loss of time incurred in turning over an immense number of unrequired leaves, in the periodical operation of posting from the daily note books and reports. Indeed, keeping the case book in the prevailing manner is an interminable and troublesome duty, hardly admitting of being performed in a manner to be of use for the purposes of study, even if the difficulties of reference be submitted to.

In one large asylum loose sheets are kept in each ward, the entries being made daily at the conclusion of the medical visit, and when the completed cases have accumulated in sufficient number, they are bound together in the form of an ordinary volume. This plan is obviously defective.