The Sliding-Press at the British Museum.*

THE object of this paper is to give a short account of the sliding-press or hanging book-press now in use at the British Museum, and to suggest the importance of its introduction elsewhere where possible, and of regard being had to it in forming the plans of libraries hereafter to be built. Every successful library is destined to be confronted sooner or later with the problem how to enlarge its insufficient space. Without considerable financial resources such enlargement has hitherto been absolutely impracticable, and even where practicable has rarely been carried into effect without a long period of make-shift, discomfort and disorganisation for which the enlargement itself affords only a temporary remedy. The great advantages of the sliding-press in this point of view are two: it allows expansion within the edifice itself, without the necessity of additional building, and it enables this expansion to be effected gradually out of the regular income of the library without the need of appealing for the large sums which would be required by extensive structural additions to the existing edifice.

I may assume that all present have seen, or will see, the photographs of the Museum sliding-press exhibited to the Conference, with the accompanying description. I may therefore be very brief in my account of it here, and simply characterise it as an additional bookcase hung in the air from beams or rods projecting in front of the bookcase which it is desired to enlarge, provided with handles for moving it backwards and forwards, working by rollers running on metal ribs projecting laterally from the above-mentioned beams or rods, and so suspended from these ribs as absolutely not to touch the ground anywhere. These are its essential characteristics, without which it would be indeed an additional book-press, but not a hanging-press or sliding-press. In recommending this system of additional accommodation, I by no means wish to insist upon

* Read at the Annual Meeting of the Library Association, held at Nottingham, September, 1891.

this special form as the only one adapted for the necessities of a library. I have no doubt that in very many libraries the arrangement of the projecting beams or rods would be inapplicable, and that it would be better to resort to the original form of the idea, from which the Museum derived its own application of it—the idea, namely, of a skeleton door made in shelves, hinged upon the press requiring expansion, running on a wheel resting upon a metal quadrant let into the floor, and opening and shutting like any ordinary door. I have merely to affirm that for the Museum the adaptation we have made is a very great improvement; but this is due to the peculiar construction of the rooms to which the new press has hitherto been chiefly confined. Rooms of this pattern do not generally exist in public libraries, and where they are not found I am inclined to think that the plan which I have just described, the prototype of the Museum sliding-press, may be found the more advantageous. I also think, however, that, for reasons quite unconnected with the sliding-press, this pattern of room ought to be imitated in libraries hereafter to be built, and when this is the case, it must inevitably bring the Museum press after it. It will therefore be worth while to describe this style of building, in order that the mutual adaptation of it and of the sliding-press may be clear. It consists of three stories lighted entirely from the top. It is therefore necessary for the transmission of light from top to bottom that the floors of the two upper stories should be open; and they are in fact iron gratings. It follows that the floor of the highest storey must form the ceiling of the second, and the floor of the second the ceiling of the third. Here is the key to the sliding-press system. The beams or rods which I have described as projecting from the presses that line the wall already existed in the shape of the bars of the grating, and did not require to be introduced. Nothing was needful but to provide them with flanking ribs projecting at right angles, from which, as you see in the photographs, the additional press could be suspended by rollers admitting of easy working backwards and forwards, and then the sliding-press was fully developed out of the skeleton door. No thought of it had ever crossed the minds of the original designers of the building; yet they could have made no better arrangement had this been planned with an especial view to its introduction. They had even made the storeys of exactly the right height, eight feet. I have not hitherto mentioned that the press takes books both before and behind,

because this feature is not essential, and must indeed be departed from when the press is applied to the accommodation of newspapers and such like large folios. For ordinary books it is manifestly a great advantage, but carries with it the obligation that the presses shall not be higher than eight feet, or, when full on both sides, they will be too heavy to work with comfort, unless, which I do not think impracticable, machinery for the purpose should be introduced.

The principle of a sliding or hanging-press is, so far as I know, entirely peculiar to the British Museum, and hardly could have originated elsewhere than in a building possessing, like the Museum, floors and ceilings entirely grated. The main point, however, the provision of supplementary presses to increase the capacity of the library without requiring additional space, had previously been worked out in at least two libraries. The earliest example, apart from casual and accidental applications at Trinity College, Dublin, and, as I have been told, the Bodleian, was, I believe, at Bradford Free Library, and the gentleman entitled to the credit of its introduction there was Mr. Virgo, the librarian. Mr. Virgo's contrivance was, I understand, a double door, not hinged on to the original press in one piece, as in the pattern I have just described, but opening in two divisions to right and left, as frequently the case in cupboards. I speak, however, with some uncertainty, for when, writing on the subject in Mr. Dewey's *Library Notes*, and most anxious to give Mr. Virgo all due credit, I applied to him for particulars of his invention, modesty, as I must suppose, rendered him silent, or at best but insufficiently articulate. I hope he may be present to-day, and that the Conference may hear the particulars from himself. It is due, however, to the Bethnal Green Library, the other institution to which I have referred as having given effect to the principle of press expansion *in situ*, to state most explicitly that the idea of its application at the Museum was derived wholly and solely from Bethnal Green; that the Bradford example, though it had been set for some years previously, was never heard of at the Museum until the model had been constructed and the first presses ordered; and that I am satisfied that Bethnal Green knew as little of Bradford as the Museum did. The Bethnal Green inventor was, I am informed, the late Dr. Tyler, the founder and principal benefactor of the institution, and, as elsewhere, the device was resorted to by him under the pressure of a temporary

emergency—in this case the accumulation of specifications of patents annually presented by the Patent Office. The introduction of the principle at the Museum dates from the November evening of 1886, when, going down to attend a little festivity on occasion of the reopening of the Bethnal Green Library after renovation, I was shown the supplementary presses by the librarian, Mr. Hilcken. I immediately saw the value of the idea, and next morning sent for Mr. Jenner, assistant in the Printed Book Department, in whose special fitness I felt great confidence, from his admirable performance of the duty of placing the books daily added to the Museum, which frequently requires much ingenuity and contrivance. I told Mr. Jenner what I had seen, and desired him to consider whether he could devise a method of adapting the Bethnal Green system to the emergencies of the British Museum. He did consider: he went down to Bethnal Green and saw the presses employed there, and, to his infinite credit, hit upon the plan of suspending the presses from the grated floors of the upper storey in the manner shown by the photograph, which, as I have already pointed out, is entirely original. A model was constructed by the aid of Mr. Sparrow, the ingenious locksmith of the Museum. Mr. Bond, then principal librarian, took the matter up warmly, the first batch of presses was ordered early in 1887, and from that time forward we have had no difficulty at the Museum in providing space for ordinary books, although some structural alterations will be requisite before the sliding-press can be applied to the whole of the New Library, and it must be modified if it is to be made serviceable for newspapers. A new room in the White Wing, not admitting of a grated ceiling, has been specially adapted with a view to the introduction of the press, and may be usefully studied by librarians about to build, although I think that some modifications will be found expedient. I have pleasure in adding that on my report of June 1st, 1888, in which I went into the whole matter very fully, the trustees obtained from the Treasury a gratuity of £100 for Mr. Jenner and of £20 for Mr. Sparrow, in recognition of their services.

I have designedly said recognition, not recompense, for no grant likely to be awarded by the Treasury would bear any proportion to the saving effected on behalf of the nation. To make this clear I will adduce some particulars stated in my

report to the trustees. Eight hundred sliding-presses can be added to the New Library at the Museum without any modification of the building as it stands, and 300 more by certain structural alterations. The cost of a press being about £13, this gives £14,300 for the 1,100 presses, or, with a liberal allowance for the cost of the alterations, say £15,000 altogether. Each press will contain on the average about 400 volumes, showing a total of 440,000 volumes, or about seven times the number of books in the great King's Library added to the capacity of the New Library, without taking in another square inch of ground. Excluding newspapers, periodicals, Oriental books—otherwise provided for—and tracts bound in bundles, and assuming an annual addition of 20,000 volumes of other descriptions, this provides for twenty-two years. But much more may be said, for, whether in the form of swinging door or sliding-press, the principle of expansion *in situ* can undoubtedly be carried out through the greater part of the Old Library, as well as in the basement of the New. What additional space this would afford, I have not endeavoured to estimate. Another immense advantage connected with the system is the facility it offers of gradual expansion. Any other enlargement requires new building; new building requires a large sum to be raised by a great effort of rating, borrowing, or subscribing; and too frequently the adjoining ground is preoccupied, and must be acquired at a great additional expense. Fifty thousand pounds would, I believe, be a very moderate estimate for such accommodation, if obtained by building, as the Museum gets from the sliding-press for £15,000, supposing even that the ground were free to build upon. In our case, however, this ground must have been purchased; and I question much whether anything short of an expropriating Act of Parliament would have obtained it at all. We may well imagine the Trojan siege we should have had to lay to the Treasury, to obtain the Act and the money; the delays of building when these were eventually forthcoming; and the fearful inconvenience which would have existed meanwhile. Now we simply put down a sum in the annual estimates for as many sliding-presses as are likely to be required during the ensuing financial year, introduce them wherever they seem to be necessary, and hope to go on thus for an indefinite number of years. Any new apartment, complete in itself, must involve waste, for some parts of it must necessarily fill up faster than others; but in the sliding-press is a beautiful elasticity; it can be introduced

wherever it is seen to be wanted, and nowhere else. Finally, and for the Museum this is most important, the additional space gained is in the close vicinity of the Reading Room. A new building must have been at a distance, involving either great inconvenience in the supply of books to readers, or an additional reading room, catalogue, reference library, and staff.

I think enough has been said to convince librarians of the expediency of taking the sliding-press, or some analogous contrivance, into account, in plans for the enlargement of old libraries, or the construction of new ones. Some libraries will not require it, either because they are on too small a scale; or because, like branch libraries in great towns, they admit of being kept within limits; or because, like Archbishop Marsh's Library at Dublin, they are restricted to special collections. But all experience shows that it is impossible to provide for the wants of a great and growing library on too generous a scale, or to exhibit too much forethought in preparing for distant, it may be, but ultimately inevitable, contingencies. York Cathedral Library might have seemed safe, but see the burden which Mr. Hailstone's recent benefaction has laid upon it. To the librarian it may be said of Space what the poet said of Love :—

“ Whoe'er thou art, thy master see,
He was, or is, or is to be.”

I should add that the cost of a sliding-press, or of a door-press, might probably be much less to a provincial library than to the Museum, where the shelves are constructed in the most elaborate manner for special security against fire.

In fact, I believe that the sliding-press is only one corner of a great question, and that in planning large libraries it will be necessary to take mechanical contrivances into account to a much greater extent than hitherto. I am especially led to this conclusion by some particulars which have reached me respecting the new Congressional Library at Washington. I am unable to state these with the requisite accuracy, but I hope that some American friend may be present who can supply the deficiency.

I have to add that the photographs of the sliding-press here exhibited by me were taken by Mr. Charles Praetorius, and that copies can be obtained from him. He may be addressed at the Museum. I hope that they fulfil their purpose; they cannot, however, of course, represent the press so well as the model of

it constructed by Mr. Sparrow for the exhibition of library appliances at Antwerp, where it was shown last year. This is now exhibited to the public in the King's Library, and Mr. Sparrow could probably produce copies of it if desired. An account of the press was contributed by Mr. Jenner to the "Library Chronicle," and by me to Mr. Melville Dewey's "Library Notes," both in 1887.

R. GARNETT.