of which there are eleven in the whole building. In these turrets a strong upward current is created by means of steam coils.

The steam pipes are so arranged that a small system for supplying hot water for baths, etc., and for heating the roof ventilators, is worked in summer.

No steam is blown off. It is all returned to the boilers as warm water.

The cost of the new building, exclusive of painting and furnishing, will be about £13,000.

No pains have been spared by Mr. Sydney Mitchell, the architect, to make all the arrangements as complete as possible.

Boarding-out of Pauper Lunatics in Scotland. By D. HACK TUKE, F.R.C.P.

(Read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital, Nov. 16, 1888.)

Those who were present at the Glasgow meeting of the British Medical Association will remember that our Scotch members, especially Dr. Turnbull, endeavoured to get up an excursion to Kennoway. It was hoped that at least twenty would avail themselves of the opportunity, but the hope was not fulfilled; then ten, but this also failed; lastly five, but I am sorry to say there were not even five righteous men found in the Psychology Section of the British Medical Association. The excursion was therefore abandoned.

Subsequently, after visiting Dr. Urquhart's asylum at Perth and seeing his excellent additions to the old building, I proceeded to the district myself, and there was, perhaps, this advantage in going when I did, that no inspection was expected. I availed myself of the kind services of Dr. Macdonald, of Markinch.

It must be borne in mind that in every county of Scotland the same system prevails on a smaller scale (see Table at end of this article), some patients residing with strangers and others with relatives; some, again, being single patients, and others, being from two to four in number, in what are called specially licensed houses. Restricting ourselves entirely to pauper ilunatics, we find that on the 1st January, 1888, there were 2,270 resident in private dwellings in Scotland. In Fife there were 281, of whom 241 were detained in "specially

licensed houses" and 40 were "single patients." In Kennoway there were 65, in Star 40, and in Thornton 29, and in the village of Auchtermuchty 14, all these (148) being in specially licensed houses. Taking the whole of Scotland, 66 per cent. of boarded-out pauper lunatics were single patients, and 34 per cent. were in the "specially licensed houses." It was in September, 1888, that I visited Kennoway, Star, and two or three very small villages in the neighbourhood, accompanied by Dr. Macdonald, who has been for ten years the quarterly medical visitor to the patients in this district. He is paid half-a-crown per patient for each visit. The parochial

inspector visits the houses also at least once a year.

The caretakers are mostly small crofters living in humble cottages, thatched, and consisting of ground floor and one The payments made to these guardians are usually six shillings per week for women and seven shillings for men patients. As the men work on the ground when able to do so and the women render a certain amount of help indoors, an additional recompense, however small, may be counted upon by the caretaker from this source. The clothing of the patients is provided for by the parish. In order to appreciate the relative cost of the boarding-out and the asylum system I give a comparative statement of the weekly and annual cost in the Woodilee Asylum, near Glasgow, and the expenditure of pauper lunatics in private dwellings in a neighbouring district (Balfron).* In the former the board and lodging amounted to a fraction more than 10s. 11d., and the supervision, etc., to about 2s. The whole expense, including clothing, amounted to 13s. 7d. per week, or £35 7s. 9d. per annum. On the other hand, in the private dwellings the cost of board and lodging was 7s., and that of supervision, etc., 9d., while the expense of clothing amounted to 1s., making a total of 8s. 9d. per week, or £22 15s. per annum. This, it will be seen, is a sum less by 4s. 10d. a week, and £12 12s. 9d. a year. It is unnecessary to say that if this saving can be effected without detriment to the patient and injury to the cotter's family, it is not only justifiable but a duty to the ratepayers to adopt the boarding-out system.

^{*} Report of Scotch Commissioners, 1888, p. 110. It should be added that in Scotland the grant of 4s. per week applies to boarded-out patients. Dr. Turnbull, on the authority of Dr. Lawson, gives the average weekly cost of boarded-out patients in the whole of Scotland in 1886-7 at 5s. 10d. In 12 District Asylums in Scotland it was 9s. 4d., without reckoning for rent, for which, if the moderate allowance of £10 a year be added, this cost would be brought up to 13s. 14d. a week. ("Journal of Mental Science," Oct., 1888).

It should be added that Dr. Clouston thinks the difference in favour of boarded-out cases is still greater.

In England the cost per patient at county and borough asylums is 8s. 9\frac{3}{4}d. per week. This includes food, salaries, clothing, necessaries, etc., and is charged to the parishes. The county treasurer pays all costs of "ordinary" repairs, additions, alterations and improvements; also new works, also interest on capital borrowed, if any. Dr. Mitchell, the late superintendent of the Wadsley Asylum, calculated that every pauper lunatic in an asylum costs the community 15s. a week, or £39 a year. It is safe to reckon for ordinary repairs, &c., about one-sixth of the maintenance account,

and £10 to £12 for new works and capital charges.

All the patients I saw were quiet, and for the most part weak-minded, either congenitally or from secondary dementia. They appeared to feel at home, and they had full liberty in going in and out. I had no reason to think that they would have been better placed in asylums. They take their meals with the family, and live neither better nor worse than their caretakers. The fare is no doubt very homely, but it is that to which they are accustomed in their own homes. The same may be said of the accommodation. It is true there is no tesselated pavement, as in the most recent pauper asylum in Yorkshire, no windows of coloured glass, no expensive tiles in the passages or kitchen, but it has yet to be proved that these and other luxuries, paid for out of the rates of an already over-taxed population, are essential to the treatment, care, or real comfort of pauper lunatics. One remarkable feature of the furniture of the cottages of the Scotch is the box bedstead, two of which are frequently placed foot to foot, as a fixture occupying one side of the kitchen, and, it may be, other rooms. Take a few of the houses into which I entered as illustrations of the rest. The first was a crofter's house, in which the caretakers, a man and his wife, had the charge of an adult imbecile. He had a bedroom, but of his own choice he slept in one of the box bedsteads in the kitchen, saying that he was dull alone. I understood that the Commissioners had in the first instance objected to this arrangement, but afterwards acceded to it as permissible under the circumstances. In the next house there were two women patients, taken charge of by a man and his wife who had two children. It should be stated that it is the exception for there to be children in the house, and very properly, but in this instance no harm was likely to arise from their pres-

XXXIV.

ence either to themselves or to the patients—probably the contrary as regards the latter. In a third cottage there were two men, one 70 years of age, while the house was occupied by a man and his wife and grandchild. An unmarried woman had charge of another cottage, and had charge of three women, who occupied one room, while a fourth patient slept in an attic. In one cottage were two men patients sleeping in the same room, one of whom, subject to fits, was engaged in rocking a cradle. It was a large two-storied cottage, and there were in the house, besides these patients, the caretakers, their son and his wife, and their baby. The man was a farmer, and had a dairy. In consequence of the patient being an epileptic the payment was 8s. a week.

It would be tedious to describe the other cottages which I visited in Kennoway, etc. They were all very similar in character, and contained from one to four patients. The rooms and the bedding were usually clean and comfortable, and with regard to the dress of the patients it was as tidy as you would wish to see it.

It is very possible that a less favourable impression would be received from an inspection of some other localities, especially in remote districts. I do not forget also that Kennoway has become a sort of model place, where it is expected that visitors will come for the purpose of forming an opinion in regard to the working of the system.

Dr. Lawson in the Scotch Report, 1887, shows the extent of the aggregation of patients in and around the parish of Kennoway, by stating, that if we were to take as a centre the village of Star, on the outskirts of that parish, and to draw a circle from it with a radius of ten miles, it would define an area in which, during the year 1886, he visited 82 men and 150 women, a total of 232 pauper lunatics in private dwellings.*

With regard to the legal documents required in these cases, the certificates consist of one signed by a medical man on "soul and conscience," containing the facts of insanity or idiocy, and those which show that the patient is a proper person to be detained in a private dwelling. Then there is the statement very similar to that in the English form, but adding the degree of relationship with the person with whom it is proposed to leave the patient, the sex, age, and occupation of such caretaker, the accommodation the house affords,

* Compare with this the much larger proportion at Gheel given in my article, "A Recent Visit to Gheel"—"Journal of Mental Science," Jan., 1886.

the number of persons accommodated in it, distinguishing children and the nature and amount of parochial relief. Lastly, there is the form of application to the Sheriff or the General Board of Lunacy to grant the order or sanction (as the case may be) for the residence of a lunatic in the private dwelling of the person whom it is proposed to place in

charge.

I must here refer again to the point of the official visitation of these patients. In this particular the Scotch consider the difference in practice between themselves and the English as all-important. First, the parochial medical officer must visit pauper lunatics at least once every three months unless otherwise regulated by request of the inspector of the poor. At every visit he enters in a book kept in the house a report of the mental and bodily condition of the patient. It is called "The Visiting Book for Patients in Private Dwellings." Secondly, there is the most important visitation by the Deputy-Commissioners in Lunacy, which is made twice a year.

Lastly, there is the inspector's visit. In regard to the removal of a boarded-out patient, an Inspector of Poor must intimate the same to the Lunacy Board within fourteen days. The same notice is required in regard to any alteration in the parish allowance, or in the event of the patient's

recovery or death.

The question will, of course, be asked for what proportion of cases does the boarding-out system make provision. It appears from this year's report of the Scotch Board of Commissioners that on 1st of January, 1888, there were 11,609 insane and idiots in Scotland. Of these 9,760 were pauper patients, of whom 2,270 were taken charge of in private dwellings, being in the proportion of 19.5 per cent. of the

total number, and 23.3 per cent. of the pauper class.

Dr. Turnbull, in an excellent paper read at Glasgow in August, states that considering what has already been accomplished, it is possible that in the future 28 per cent. of the insane in Scotland will be boarded-out. I suspect he is too sanguine. He says, "that the authorities of the city parish of Edinburgh have long recognized the value of the boarding-out system. One of the Assistant-Inspectors of Poor devotes a large part of his time to supervising it, finding suitable guardians, and seeing that the patients are efficiently and properly cared for. The parish is not exceptionally well situated for boarding-out. It draws its cases entirely from an urban population in the centre of

Edinburgh, and as patients cannot be suitably boarded in such a locality, it has been necessary to find guardians at a considerable distance from the parish itself. Many of the patients are boarded in different villages in Fife. In June of this year the total number of lunatics on the parish registers was 260. Of these 109 (or 42 per cent.) were in the Royal Edinburgh Asylum, or in special institutions for imbeciles; 78 (or 30 per cent.) were in the lunatic wards of the poor-house, and 73 (or 28 per cent.) were boarded in private dwellings. These proportions are almost identical with what they were in 1883, showing that the present state of matters is not exceptional, but can be steadily kept up"

("Journal of Mental Science," Oct. 1888, p. 375).

Let us now take this year's reports on the condition of patients in private dwellings by the Commissioners who visited them, namely, Drs. Sibbald, Fraser, and Lawson. There has been in Fife an increase in the number of patients in specially licensed houses, as compared with the previous year, while in some other counties the number had diminished. Dr. Lawson states that there is a growing tendency to the concentration of the population of such houses in this county and that of Perth. In Fife there was an increase of 46 per cent. in 1885, 40 per cent. in 1886, and 7 per cent. in 1887. It is in the villages of Kennoway, Star, Thornton, and Auchtermuchty, that this concentration has taken place. I mention this fact more especially, because it is not desired by the Lunacy Board that the population of any one district should be crowded with the insane. It would be regarded as a misfortune if the example of Gheel was followed in this respect. The ratio of insane to sane is not very great. It should be noted that the patients boarded-out in specially licensed houses are, with scarcely any exception, under the care of unrelated guardians. Again, of the single patients visited by Dr. Lawson in 1887, 40 per cent. were living with non-relatives. Dr. Lawson answers the question—Do not these features—the growing aggregation and the alien guardianship-appear anomalous inasmuch as the breaking-up of aggregations in asylums and the return of uncured lunatics to their own homes, would seem to be the great aim of the boarding-out system—by pointing out that "the aggregations in villages are not essential to the system; that they have led to no inconvenience; and that efforts have been made successfully to get Inspectors of Poor to open up new areas in cases where it appeared to be injudicious to swell the number of insane residenters by granting additional special licences."* The advantages of moderately sized aggregations are, however, fully recognized. They "make the labours of the inspector and the medical man easier and more capable of systematic performance, and consequently more regularly performed." Experience in Kennoway and other districts induces Dr. Lawson to prefer the guardian "to undertake at first the care of only one patient, that only after experience and repeated visitation on the part of officials, a special license for two should be granted, and that on no account should a license for three or four patients be given, unless where some particular qualification on the part of the guardian is combined with special fitness of the home and the neighbourhood. Rigid adherence to such a rule would go far towards preventing the risk of overcrowding villages with fatuous paupers." + An extremely important and practical observation is made by Dr. Lawson, which bears with great force upon the relative advantages of the Scotch and English systems of boarding-out. It is certainly a very melancholy conclusion to come to, but if it be true we must accept it and adapt our form of provision for the chronic insane to it. The question then is, Does the related or the unrelated guardian best fulfil his or her duties to the patient? The answer given by Dr. Lawson is this: "The unrelated guardian is generally more efficient, more amenable to advice and direction, and being completely under the control of the parochial authorities, cannot, as related guardians sometimes do, thwart their best endeavours for the patients by obstinate and misguided opposition." Hence it can be understood why Dr. Lawson does not consider the increase of alien guardianship as an unqualified evil, and indeed, not necessarily an evil at all. I found from conversation with Dr. Sibbald, for whose opinion all who know him will entertain the greatest possible respect, that he has not lost any of his faith in the success of the boarding-out system. One point on which he insisted very strongly was the careful inspection of pauper patients when boarded-out, by the Lunacy Board in Scotland, and the absence of such inspection on the part of the English Board.

The testimony of Dr. Fraser to the advantages of boarding-out is as strong as it well can be. Ten years of intimate knowledge of its working leads him to the conclusion that it is alike beneficial to the insane and to the ratepayers, because it avoids the erection of costly asylums and the congregation

^{* &}quot;Report of Scotch Commissioners, 1888," p. 118. † Op. cit., p. 119.

of vast numbers of lunatics in one building, while the cost of maintenance is, as we have seen, less than the cost of those provided for in asylums. Again, it is urged that by this means the insane have natural surroundings and domestic care, thus increasing their comfort and promoting bodily health, as proved by the tables of mortality.* If all this can be obtained, and it does not interfere, as alleged, with the safety of the public, it is, I say, an enormous boon to any country which adopts this system. The misery and neglect, which Sir Arthur Mitchell has not concealed when he discovered them among the insane cared for in private dwellings, are likely to be prevented by good and frequent inspection, and, therefore, cannot be fairly put to the account of the boarding-out system. At the same time, it must be admitted that abuses are more likely to be practised and concealed in private than in public modes of care and treatment.

Dr. Fraser, in his last report on patients in private dwellings, states that during the three years he has worked in his district, which includes 22 counties, the number of the pauper insane thus located has risen from 1,087 in the year 1885 to 1,192 in 1887, an increase of 105 in three years,

which he regards as very satisfactory.

The conclusions to which a visit to the boarded-out patients in Scotland leads me, may be briefly stated as follows:—

Success altogether depends upon the careful selection of cases, the equally careful selection of guardians, proper accommodation and locality, frequent and efficient inspection, and, lastly, the character of the household in reference mainly to sex and age.

As regards the cases suitable for boarding-out, it would be a fatal mistake to suppose that all dements or idiots can be safely cared for in this manner. A very considerable number must always require asylum care and treatment. I am sure that the Scotch Commissioners are sufficiently alive to the necessity of bearing this in mind.

Next, as to the guardians or caretakers, it seems to me perfectly certain that the qualifications necessary for occupying this position are not so common as to render it likely that the area over which an insane population can be scattered will be very extensive.

So, again, as to proper and sufficient accommodation and suitable locality, it must often happen that these are not favourable to the carrying out of the system.

* See Scotch Report, p. 107-8.

That frequent and efficient inspection is necessary to prevent neglect or cruelty is obvious. I trust that in the case of Scotland the visits of the medical officer every quarter and the Commissioners or Deputy-Commissioners do, to a large extent, prevent the abuses likely to occur. It may also be hoped that the observations of neighbours may exert a wholesome check upon the actions of the guardians. It is admitted that lamentable results have occasionally occurred in the families of the caretakers. Perhaps the wonder is that these have not been more frequent.*

Lastly, but of almost primary importance, is the constitution of the household in which it is desired to place the patient. In many instances it will be highly unsuitable to allow children or young women to be in the house, although the patient might be very properly placed in the cottage of an elderly couple. I consider it of the utmost importance that, while the interests of the insane are being regarded, we should not lose sight, as there is great danger of doing, of the interests, from a moral point of view, of the families into which it is desired to introduce a lunatic.

In conclusion, I would say that if these conditions are not fulfilled, the boarding-out system will prove a most unhappy failure, and the condition of the patients in regard to comfort, cleanliness, protection, and treatment will contrast very unfavourably with that usually witnessed in modern asylums; while, on the other hand, if these conditions are fulfilled, the number of cases placed out in cottages, although comparatively small, will be, I grant, a sensible relief to the ever-growing demands made upon asylum accommodation.

The following tabular statement, prepared from the last Scotch Commissioners' Report, will prove useful:—

January 1st, 1888.	M.	F.	T.
January 1st, 1888. Number of Pauper Lunatics in Private Dwellings in Scotland	876	1394	2270
Increase during the year, 130.			
Visited in the County of Midlothian:-+			

Resident with Strangers 16 54 70 23 32 55

Total Pauper Patients 39 86 125

* See Record of Accidents, etc., in the Commissioners' Report, 1888, p. 113 and 122. For an authoritative and candid account of the boarding-out system,

see Sir Arthur Mitchell's book, entitled "The Insane in Private Dwellings." Edinburgh, 1864.

† Many who are chargeable to Midlothian are boarded out in other counties, the majority being in Fife.

512 Boarding-out of Pauper Lunatics in Scotland. [Jan.,

Additions to the numbers in I	L idlot	hian (1	8 being	Trans	fers)	6	15	21
Recovered	•••	•••`		•••		0	1	1
Transferred to other Counties	•••	•••		•••	•••	2	4	6
Removed from Poor Roll	•••	•••	•••	•••	•••	1	8	4
Removed from Poor Roll	-••	•••	•••	•••	•••	1	8	4
					α.			

								Specially	
							Single	in Licensed	
	Visi	ited :—					Patients.	Houses.	Tl.
1.	In the	County	of Midlothian	•••	•••		77	48	125
2.	,,	,,	$\mathbf{A}\mathbf{yr}$	•••	•••		84	46	130
3.	"	"	Banff	•••	•••		38	6	44
4.	"	"	Berwick	•••	•••		21	6	27
5.	"	,,	Caithness		•••		62	3	65
6.	"	"	Clackmann	an	•••	•••	8	0	8
7.	"	"	Dunbarton	•••	•••	•••	11	0	11
8.	"	"	Elgin	•••	•••		31	12	43
9.	"	**	Forfar	•••	•••		74	19	98
10.	,,	,,	Haddington	1	•••	•••	20	10	80
11.	"	"	Inverness	•••	•••	•••	96	23	119
12.	,,	,,	Kirkcudbri	ght	•••	•••	19	4	23
13.	,,	,,	Lanark	•••	•••		115	57	172
14.	,,	,,	Nairn	•••	•••	•••	8	0	8
15.	,,	,,	Orkney	•••			30	0	80
16.	,,	"	Peebles	•••	•••		3	0	8
17.	"	"	Renfrew	•••	•••	• • •	23	1	24
18.	,,	"	Roxburgh	•••	•••		11	2	18
19.	"	,,	Selkirk	•••	•••	•••	4	0	4
2 0.	,,	,,	Shetland	•••	•••	•••	44	3	47
21.	,,	,,	Stirling	•••	•••	•••	30	101	131
22.	"	"	Sutherland	•••	•••	•••	34	1	35
23.	,,	"	Wigtown	•••	•••	•••	42	0	42
24	,,	,,	Aberdeen	•••	•••	•••	119	9	128
25.	,,	,,	Argyll	•••	•••	•••	71	23	94
26 .	"	"	Bute	•••	•••	•••	35	14	49
27.	"	"	Dumfries	•••	•••	•••	36	5	41
28.	"	"	Fife	•••	•••	•••	40	241	281
2 9.	"	"	Kincardine .	•••	•••	•••	6	7	13
3 0.	,,	"	Kinross	•••	•••	•••	4	7	11
81.	"	,,	Linlithgow	•••	•••	•••	15	0	15
32 .	,,	,,	Perth	•••	•••	•••	97	97	194
33 .	"	"	Ross and Cr			•••	85	0	85
34 .	"	"	Western Isl	es, Sky	7e, etc.	•••	57	0	57
							1445	745	2190*

* The above is a decrease since last year of 24 in the number of Single Patients visited, and an increase of 30 in the number in Specially Licensed Houses, or a net increase of six.

Number of Admissions during the year, 146; being 79 less than in 1886.

Of these Admissions, four have recovered, 12 being removed to Asylums, three withdrawn from the Poor Roll, and one died, being 20 Discharges in all. Of the 146 Admissions, 101 were Removals from Asylums or lunatic wards of Poor Houses, and 45 were persons certified to be lunatics while residing in private dwellings, their continued residence being sanctioned by the Board.