

OMBAY IMPROVEMENT TRUST



IMPROVEMENT OF INSANITARY AREAS.

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Bombay Improvement Trust

ESPLANADE ROAD,
Bombay, 14th June 1915.

IMPROVEMENT OF REPRESENTED AREAS

CIRCULAR TO TRUSTEES.

In Government letter No 2286 of 15th April 1911, Government asked the Trust to furnish them with a definite programme with estimates for execution of Improvement schemes in all areas which have been represented to the Board in the order of their relative urgency

2 After some correspondence with the Municipality directed towards obtaining vital statistics for the several areas and the Health Officer's opinion as to the order in which these areas should be dealt with, the matter was discussed by the Board on 1st August 1911 and referred to the Improvements Committee who were asked to inspect the several represented areas in company with the Municipal Executive Health Officer and report in consultation with him how each should be dealt with and in what order, and what the approximate cost would be

3 It was proposed in the first instance that the Committee should inspect * the Kamatipura district with the Health Officer who was thereupon addressed in the matter (No 6197, dated 4th August 1911) His attention was drawn to passages in Thompson's "† Housing up-to-date" regarding the cutting out of houses here and there to admit light and air and it was pointed out that in England the wholesale demolition method is now in disfavour on account of its prohibitive cost

4 Two requests were made to him and these, with his replies of 19th August 1911, are abstracted below —

<i>Request</i>	<i>Answer</i>
1 To consider on the spot whether any measures short of wholesale demolition will suffice in respect of the Kamatipura district	1 Yes, much can be done without wholesale demolition
2 To mark down any houses in Kamatipura which he thinks such as would in England be dealt with under the Housing of the Working Classes Act, Part II	2 It is difficult to compare the conditions in the two countries Each house would have to be inspected and the conditions attaching to each separately reported on And a street and house plan would be required He has no officer with the necessary experience to help him

*This inspection was made on 22 8 11.

†Circulated to Trustees, Cir No 264 of 10-7 12

*Request.**Answer*

The English Act empowers the local sanitary authority to take action. In Bombay the Corporation have no power to condemn a house as U H H, but under Section 378 (amended) of Bombay City Municipal Act, Municipal Commissioner can, on Health Officer's representation, and with sanction of Standing Committee, close, but not improve or demolish unhealthy houses

These powers are of little value for the purpose of improving insanitary areas

The duty of improving insanitary areas in Bombay vests in the Improvement Trust

How should areas be dealt with?

- (1) either by wholesale demolition, acquisition and rebuilding, or
- (2) by condemning houses and groups of houses and insisting on rebuilding to proper standard of light, ventilation, etc

- (1) Is financially impossible

As to (2), it is only possible to take up the worst areas and deal with them on the lines of Parts II and III of the English Housing of the Working Classes Act

Assuming that the Trust has sufficient power, he sketches a form of procedure (for details see appended * extract from his report) and suggests that the Improvement Trust request the Corporation to allow the Health Officer to undertake the work of inspection and initiation and that he should be remunerated by the Trust

5. This letter of the Health Officer was entered in the Agenda of the 5th September 1911, but was not discussed till 30th January 1912, when the Chairman raised the following points .—

- (1) whether the Board should apply for powers to take the proceedings sketched by the Health Officer, and
- (2) whether the Board's previous decision (Trustees' Resolution No. 274 of 19th December 1905) not to apply for powers similar to those of a Local authority under Parts II† and III of the English Housing of Working Classes Act, 1890, should be reconsidered.

* *Vide* p. 13 *infra*.

† *Vide* pp 32-4 *infra*.

These two points were discussed at the Board meeting of 2nd April 1912 and referred to the Improvements Committee

6 Meanwhile the Chairman and his staff had been studying various publications on methods of slum improvement and in particular the reports of the Birmingham Corporation's Housing Committee which were circulated to the Trustees in March and July 1912

7 Further, with a view to providing an object-lesson in the methods of Part II of the Housing of the Working Classes Act, a programme was devised in October 1911 for gradually improving the Trust's Nowroji Hill Estate by demolishing obstructive houses and closing ill-ventilated and ill-lighted rooms, and the progress made by the Land Manager in the execution of this programme was reported to the Board under Circular No 130 of 10th April 1912

8 A model of 4 typical insanitary houses in Umarchadi was prepared to show how insanitary the back and side rooms are in deep houses abutting on narrow gullies with high buildings all round This was sent to all Trustees with Circular No 143 of 18th April 1912

9 The Chairman had made frequent inspections of the represented areas from August 1911 onwards, sometimes with the Health Officer and sometimes with the Land Manager, and he prepared final * notes on them between the months of April and July 1912 Copies of these notes showing how in the Chairman's opinion each area should be dealt with were circulated with plans to all the members of the Improvements Committee in the following order —

Kolbhatwadi	.			19th April 1912
Telwadi	.	.		20th „ „
Umarchadi	.	.	.	26th „ „
Middle Colaba	.	.	..	9th May „
2nd Nagpada	..	..	..	24th June „
Kamatipura	.	.	.	26th „ „
Madanpura	..	.	.	3rd July „

10 In May and June 1912, the Chairman was engaged in finally revising and completing a lecture on Light and Air in Dwellings in Bombay which he had been engaged on since December 1911, and this lecture which suggests that all inadequately lighted and ventilated rooms in Bombay might be gradually closed and house-owners required, with some assistance from public funds, to reconstruct their houses, so that all dwelling rooms in them may have a sufficiency of light and air, was read before the Bombay Sanitary Association on 27th June 1912 and a copy was sent to each of the Trustees

11 On 5th July 1912, the Improvements Committee met to consider the whole question. The Chairman stated the two points for consideration (*vide* para 5 above) and referred to the suggestions made in his lecture of 27th June 1912, and also to the several * notes on represented areas which he had circulated to the Members of the Committee

12 The Committee after discussion accepted the Chairman's suggestion that they should inspect the several represented areas with him to see how far his proposals for improvement of houses without total demolition were practicable, and soon after Mr. Orr's return from 3 months' leave the Committee met on 4th November 1912 and inspected in the Second Nagpada District several houses of the type shown on plans B & C in Appendix A of Mr Orr's lecture on Light and Air

13 On 6th November 1912 the Committee submitted their * report to the Board. The conclusions which the Committee came to were as follows.—

- (1) The method of improvement by wholesale acquisition and demolition must be abandoned as involving prohibitive expenditure, much delay and great disturbance of house-owners and tenants.
- (2) The method of improvement by removal of obstructive buildings or parts of buildings, closure of U H H rooms and application of 63½° rule to new or rebuilt houses on the lines suggested by the Chairman in his detailed notes † on the several represented areas should be tried.
- (3) To justify and facilitate the adoption of the Chairman's suggestions, legislation on the lines‡ of Part II of the Housing of the Working Classes Act, 1890, and Sections 17 and 18 of the English Housing and Town Planning Act, 1909, is required. It would, for instance, be wrong to acquire and demolish obstructive houses at great cost to the public purse until there is a law on the lines of Section § 38 (8) of the Housing Act of 1890 under which a contribution can be levied for betterment from the owners of properties benefited by the demolition.
- (4) The Municipal bye-laws should be altered at an early date so as to give the Municipality adequate control over building operations, in particular, the Municipality should have power to prevent an owner from altering or enlarging his building in such a way as to lower the standard of lighting and ventilation in the neighbouring houses

[Note.—The amendment of the Municipal bye laws has been under consideration by a Corporation Committee since January 1912 and a note on the progress of the work done by this Committee will be found in App B p 38]

- (5) The remedial measures referred to in (2), (3) and (4) are required not only in represented areas but over the whole City
- (6) No satisfactory estimate of the cost of improving any area can be prepared until it is known how far Government will help by legislation
- (7) Improvement operations on the lines of Part II of the Housing of the Working Classes Act can be financed better by ear-marking a few lakhs a year for the purpose than by means of loans

* Vide pp 7 to 9 *infra*

† Vide pp 14 22 *infra*

‡ Vide pp 32-7 *infra*

§ Vide p 37 *infra*

- (8) For the reasons set out above Government should be moved not to wait for detailed estimates for the improvement of represented areas but to urge the Government of India to grant the Board an annual subsidy of Rs 4½ lakhs for the improvement of all insanitary areas in the City whether represented or not

14 The Report of the Committee was considered at the meetings of the Board held on 19th and 22nd November and 10th December 1912 and ultimately after much discussion the Board decided without committing themselves to any opinion on the remedial measures advocated by the Committee (1) to await the report of the Committee appointed by Government to examine the questions raised in Mr Orr's lecture on Light & Air, before coming to a definite decision as to how the several represented areas should be dealt with, and (2) to move the Government of India to grant the Trust an annual subsidy of 4½ lakhs for improvement schemes and not to withhold such assistance until the deliberations of the Government Committee referred to above were completed; and Government were informed of this decision in Secretary's No 9407 of 11th December 1912

15 The Chairman, having learnt at the Madras Sanitary Conference that the Government of India were allocating funds for sanitation, moved the Board to ask Government for a special allotment of funds in addition to the permanent annual subsidy asked for in T R No 232 of 10th December 1912, and Government were addressed accordingly under T R. No 240 of 17th December 1912 In response to this application Government in April 1913 gave the Trust a special grant of 4 lakhs to enable them to undertake experimental measures in connection with slum improvement, and in T R. No. 97 of 5th May 1913 the Improvements Committee were asked to submit proposals for utilizing this grant.

16 The Committee recommended the Undria Street Improvement Scheme No 41 which was adopted by the Board in T R No * 120 of 30th May 1913, notified on 5th June 1913, sanctioned by Government in February 1914 and declared on 25th March 1914 A brief outline of this scheme will be found on pages 11 and 12 of the Administration Report for 1913-14, and the Land Manager's report† of its progress up-to-date is appended hereto

17 In November 1913 the Chairman in circulating an English newspaper cutting‡ advocating slum improvement on lines similar to those advocated by the Improvements Committee referred to the great delay in the issue of the Government Light and Air Committee's report and pointed out that the question of moving Government to legislate on the lines of Part II of the Housing and Town Planning Act was too important to be indefinitely postponed The Board however came to the conclusion that they should continue waiting for the Light and Air Committee or the Municipality to take action before taking any further action themselves

* Vide pp 43-8 *infra*

† Vide pp 48-50 *infra*

‡ Vide pp 51-4 *infra*.

18 In July 1914 Mr Orr in submitting* to the Board a list of represented areas with cost of improvements according to original estimates again suggested that the Board should no longer await the Government Committee's report but should forthwith take up consideration of the Improvements Committee's recommendations, but the Board did not adopt the suggestion.

19 The Bombay Development Committee in their Report dated the 29th April 1914 had suggested that the Board should consider whether they should not undertake small improvement schemes for the betterment of congested areas. The Board however in communicating to Government their decisions on the Development Committee's recommendations demurred to this suggestion in the following terms —

“The Board are of opinion that the general question of dealing with the numerous insanitary areas in Bombay City must be postponed pending

- (1) the augmentation of the Board's resources,
- (2) the amendment of the Municipal Act and bye-laws on the lines recommended by the Development Committee,
- (3) the evolution of a satisfactory scheme of slum improvement which will be less costly, involve less delay and create less disturbance than the wholesale demolition method hitherto pursued”

20 The Government Light and Air Committee submitted their report to Government on 14th April 1915. A copy received from their Secretary on 15th idem has been sent to all Trustees under a special circular which has yet to be seen by a few Trustees who have been away from Bombay. Meanwhile this précis with all its accompaniments will be printed and when Trustees have had time to study it a special meeting will be called to consider the question how the represented areas should be dealt with, with particular reference to Mr. Orr's Lecture on Light and Air in Dwellings in Bombay and the first 3 of the conclusions of the Improvements Committee set out in para 13 above

21 Mr Orr's personal views are fully set out in his minutes printed in the preamble to T R. 182 of 11th August 1914, which with certain passages mentioned in the preamble is reprinted in App. F. pp 58-71

Bombay, 14th June 1915

J P. ORR,
Chairman

* *Vide pp 55-57 infra*

APPENDIX A.

(referred to on pages 4, 56 and 58)

ESPLANADE ROAD,
Bombay, 6th November 1912

Report of the Improvements Committee.

No II

Request from Government for a definite programme with estimates for improvement schemes in all the areas which have been "represented" to the Board in the order of their relative urgency

1 We have for a long time past had under our consideration the question of the improvement of the several areas which have been "represented" by the Municipal Commissioner under Section 24 of the Bombay City Improvement Act, but for want of funds have not yet been dealt with by the Trust

2 The question was first referred to us by the Board on* 1st August 1911. A précis of what has been done since then in connection with the † question was sent to each of the Trustees on 31st ultimo and we append a copy hereto for easy reference

3 We have now considered the whole question in Committee and without committing ourselves to complete approval in detail of all the measures† the Chairman has proposed for dealing with the represented areas and the rest of the City we agree with him that the wholesale acquisition and demolition method must be abandoned as needlessly expensive and slow, besides unnecessarily disturbing the house-owners and their tenants We think that for a given sum expended in a given time in these areas far greater and more widespread sanitary improvements could be effected under some such procedure as he has suggested than under the old method of wholesale acquisition and demolition.

4 There are few houses in these areas which have not *some* rooms entirely fit for human habitation . but there are many which have some rooms so extremely badly lighted and ventilated that they should be at once closed There is, however, no law under which a closing order can be passed except Section 378 of the Bombay City Municipal Act, which appears to refer to whole houses, not to single rooms used as dwelling-places The only means open to the Trust for getting particular rooms closed is to first acquire the

* T R No 160

‡ Printed at pp 10-12 *infra*

† *Vide* pp. 14-22 *infra*.

whole house. This brings us back practically to the wholesale acquisition method, which we have already condemned. We would therefore prefer to wait for legislation on the lines of Part¹ II of the Housing of the Working Classes Act, 1890, summarised in Mr Harvey's Report *No 14499, dated 27th August 1903, and †Sections 17 and 18 of the English Housing and Town Planning Act, 1909, which is practically what was recommended by the Municipal Commissioner (Mr Harvey) in 1903 and again by Dr. Turner in his No 1536[†] of 19th August 1911.

5 We find that there has been a considerable extension of buildings in the represented areas in recent years and that new storeys have been added to many houses, with the result in many cases that the lighting and ventilation of side and back rooms in neighbouring houses have become more defective than ever. The Trust can do something towards remedying this by acquiring and demolishing the most obstructive houses, in order to form ventilation chowks for the neighbouring houses, but it will be useless for them to acquire a few houses to this end, so long as they or the Municipality have not got adequate control over the neighbouring houses, so as to be able to prohibit alterations which may reduce the standard of lighting and ventilation in the neighbourhood. At present the Trust can only secure this control by acquiring all the houses, which again brings us back to the condemned wholesale acquisition method. This points to the necessity of an early alteration of the Municipal bye-laws, and this matter is, we understand, now engaging the attention of a Committee of the Corporation.

6. With regard to Government's request that the Trust should say in what order the represented areas should be dealt with and what the operations in each such area will cost, we are not prepared to recommend that the remedial action indicated in the last two paras should be confined to anyone represented area before any other is dealt with.

The necessity of closing insanitary rooms, removing obstructive buildings and controlling future building operations applies equally to all the represented areas and indeed not only to them but to the whole city. It is therefore out of the question to confine our estimate of costs to the represented areas, and moreover no satisfactory estimate for any area can be prepared until we know how far we are to be helped by legislation. In particular, we think, it would be wrong to acquire obstructive houses for the benefit of owners of surrounding houses until we have a law on the lines of Section³ 38 (8) of the English Housing of the Working Classes Act of 1890, by which a contribution towards nett cost of acquisition and demolition of the obstructive property can be recovered from the owners of the property benefited by the demolition.

7. It is, however, clear that, whatever operations are finally determined on, they can, if they follow the lines of Part II of the Housing of the Working

§ *Vide* pp 32-34 *infra* * *Vide* pp 23-27 § *Vide* pp 35-37 † *Vide* pp. 10-11 ‡ *Vide* p 37 *infra*

Classes Act, be better financed by annual grants of a few lakhs specially earmarked for this work than by loans

Every year so many of the houses most urgently in need of improvement can be dealt with, as the annual grant suffices for and the experience of the first few years will show how much money can be usefully spent every year. For the Trust's ordinary schemes heavy initial expenditure has to be incurred for acquisition and works, and loans are the best means of financing such schemes, since the Trust are acquiring large properties under them and can reckon on the recoupment from frontages for the repayment of these loans, but under the new methods the Trust will acquire only single houses here and there and instead of getting an annual return from the property so acquired will have to bear as out-right loss such share of the cost of acquisition as may not be recoverable from owners of adjacent houses. There will be no costly works to undertake and therefore a grant of a few lakhs every year will serve to finance the Trust's operations for so long as the money lasts and the Trust will never be committed to attempting anything beyond their means

8 We therefore think that in reply to the reference from Government the Board should explain the circumstances set out above and ask Government for the same annual subsidy—4½ lakhs—as was asked for in para 15 of the note as to the financial assistance required from Government by the Bombay City Improvement Trust, which was sent to Government under Chairman's No 815, dated 2nd February 1911. It is true that very much less expenditure will be required in the represented areas for which a sum of 90 lakhs was provided in the programme on which the original estimate of 4½ lakhs was based, but it should be urged that advantage should be taken of the reduction in the cost of improving particular areas to extend the improvement operations to every part of the City

It has been frequently pointed out that there has been no substantial fall in the high general death-rate of Bombay since the Trust was instituted, and we can entertain no hope of any such fall occurring until improvement operations directed mainly towards admitting more light and air into one room tenements have been extended to every part of the City

J P ORR,
President

APPENDIX A-1.

(referred to on page 7)

Improvement of Unhealthy Areas in the City

In Government letter No 2286 of 15th April 1911, Government asked the Trust to furnish them with a definite programme with estimates for execution of improvement schemes in all areas which have been represented to the Board in the order of their relative urgency

2 After some correspondence with the Municipality directed towards obtaining vital statistics for the several areas and the Health Officer's opinion as to the order in which these areas should be dealt with, the matter was discussed by the Board on 1st August 1911 and referred to the Improvements Committee who were asked to inspect the several represented areas in company with the Municipal Executive Health Officer and report in consultation with him how each should be dealt with and in what order, and what the approximate cost would be

3 It was proposed in the first instance that the Committee should inspect* the Kamatipura district with the Health Officer who was thereupon addressed in the matter (No 6197, dated 4th August 1911)

His attention was drawn to passages in Thompson's "Housing up-to-date" regarding the cutting out of houses here and there to admit light and air and it was pointed out that in England the wholesale demolition method is now in disfavour on account of its prohibitive cost

4 Two requests were made to him and these, with his replies of 19th August 1911, are abstracted below.—

<i>Request</i>	<i>Answer</i>
1 To consider on the spot whether any measures short of wholesale demolition will suffice in respect of the Kamatipura district	1 Yes, much can be done without wholesale demolition
2 To mark down any houses in Kamatipura which he thinks such as would in England be dealt with under the Housing of the Working Classes Act, Part II	2 It is difficult to compare the conditions in the two countries Each house would have to be inspected and the conditions attaching to each separately reported on And a street and house plan would be required He has no officer with the necessary experience to help him The English Act empowers the local sanitary authority to take action In Bombay the Corporation have no power to condemn a house as U H H, but under Section 378 (amended) of Bombay City Municipal Act, Municipal Commissioner can, on Health Officer's representation, and with sanction of Standing Committee, close, but not improve or demolish unhealthy houses

* This inspection was made on 22-8-11

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*Request**Answer*

These powers are of little value for the purpose of improving insanitary *areas*

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How should areas be dealt with?

(1) either by wholesale demolition, acquisition and rebuilding, or

(2) by condemning houses and groups of houses and insisting on rebuilding to proper standard of light, ventilation, etc

(1) Is financially impossible

As to (2), it is only possible to take up the *worst areas* and deal with them on the lines of Parts II and III of the English Housing of the Working Classes Act

Assuming that the Trust has sufficient power, he sketches a form of procedure (for details see appended *extract from his report) and suggests that the Improvement Trust request the Corporation to allow the Health Officer to undertake the work of inspection and initiation and that he should be remunerated by the Trust

5 This letter of the Health Officer was entered in the Agenda of the 5th September 1911, but was not discussed till 30th January 1912, when the Chairman raised the following points —

(1) whether the Board should apply for powers to take the proceedings sketched by the Health Officer, and

(2) whether the Board's previous decision (Trustees' Resolution No 274 of 19th December 1905) not to apply for powers similar to those of a Local authority under Parts II and III of the English Housing of Working Classes Act, 1890, should be reconsidered

These two points were discussed at the Board meeting of 2nd April 1912 and then referred to the Improvements Committee, who have yet to report on them to the Board

6 Meanwhile the Chairman and his staff had been studying various publications on methods of slum improvement and in particular the reports of the Birmingham Corporation's Housing Committee which were circulated to the Trustees in March and July 1912

7 Further, with a view to providing an object-lesson in the methods of Part II of the Housing of the Working Classes Act, a programme was devised

* *Vide p 13 infra*

in October 1911 for gradually improving the Trust's Nowroji Hill Estate by demolishing obstructive houses and closing ill-ventilated and ill-lighted rooms, and the progress made by the Land Manager in the execution of this programme was reported to the Board under Circular No 130 of 10th April 1912

8 A model of 4 typical insanitary houses in Umarkhadi was prepared to show how insanitary the back and side rooms are in deep houses abutting on narrow gullies with high buildings all round. This was sent to all Trustees with Circular No 143 of 18th April 1912

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10 In May and June 1912, the Chairman was engaged in finally revising and completing a lecture on Light and Air in Dwellings in Bombay which he had been engaged on since December 1911 , and this lecture which suggests that all inadequately lighted and ventilated rooms in Bombay might be gradually closed and house-owners required, with some assistance from public funds, to reconstruct their houses, so that all dwelling rooms in them may have a sufficiency of light and air, was read before the Bombay Sanitary Association on 27th June 1912 and a copy was sent to each of the Trustees

11. On 5th July 1912, the Improvements Committee met to consider the whole question The Charman stated the two points for consideration (*vide* para 5 above) and referred to the suggestions made in his lecture of 27th June 1912, and also to the several *notes on represented areas which he had circulated to the Members of the Committee

12 The Committee after discussion accepted the Chairman's suggestion that they should inspect the several represented areas with him to see how far his proposals for improvement of houses without total demolition were practicable , but Mr Orr was unable to arrange for these inspections before he went on leave on the 20th July and nothing has been done in his absence

13 The Committee have now been asked to meet at 2nd Nagpada on the 4th instant, and it is hoped that they will make definite recommendations to the Board within a fortnight

Bombay, October 31st, 1912

J P. ORR,

Chairman

ACCOMPANIMENT TO APPENDIX **A-1.**

(referred to on pages 2 and 11)

Extract from letter No 1536, dated 19th August 1911, from the Executive Health Officer, Bombay Municipality, giving outline of the procedure to be adopted to improve houses by giving them light and air, etc

Take Kamatipura The standard having been decided upon as to light, ventilation in and around the dwellings, size of rooms, paving and drainage, each house is inspected and each particular noted in a proper form to be adopted

Notice is then served on the owner stating in proper form the conditions found and issuing an order for closing and demolishing unless the house is rebuilt within 3-6 months on the standard laid down

Option is given to the owner to rebuild on plans to be approved or the Improvement Trust acquire the site, rebuild according to their standard and hand the property over to the owner after deducting the expenses incurred

In carrying out this procedure a number of houses must be taken together, rebuilt with a view to improve the areas as well as the individual houses, bearing in mind the class of people who will inhabit them The paved and drained *open space around the buildings* will be one of the chief considerations, the size and height of the buildings and dwelling rooms being according to the bye-laws

In adopting this plan it would be necessary to provide as in Part III of the Housing of the Working Classes Act common lodging houses or chawls which will be ready by the time the unhealthy or obstructive houses have been demolished It is possible that groups of existing houses could be so improved and acquired as to provide for this

By combining the power given in the amended section 378 of the Municipal Act, with the powers vested in the Improvement Trust, much could be done, but the inspection and opinion necessary to condemn and close will have to come from the Health Officer

APPENDIX A-2.

(referred to on pages 3, 4, 7 and 12)

Chairman's Note on Kolbhatuadi Represented Area

The area represented by the Municipal Commissioner was the whole area between Girgaum Road, Princess Street, Kalbadevi Street and Jambulwadi

2 In reporting on the representation the Land Manager suggested on 3rd May 1905 that certain large houses on Kalbadevi and Girgaum Roads which would be very expensive to acquire should be omitted and the remainder as shown within a red line on the plan acquired

3 Since then many changes have been made in the buildings in this area Various improvements were effected by the orders under the Epidemic Diseases Act The buildings that have been entirely reconstructed since 1898 are indicated by figures on the plan, the red figures indicate the original number of floors and the black figures the existing number.

4 It will be observed that several houses have been increased in height, and unfortunately in nearly all these cases the result has been to make light and ventilation in neighbouring houses even worse than before Where a house site is coloured yellow, but bears no number, that means that petty improvements were made under the Epidemic Diseases Act without involving reconstruction. Such improvements included making air spaces next to privies, paving court yards, making new windows and so on.

5 The sites painted red are vacant and should remain vacant if the neighbouring houses are to have sufficient light and air

6 The lanes are mostly private streets and are therefore not kept in proper repair. There would be great improvement in this area if the Municipality undertook the maintenance of all these streets, they are far too narrow for through cart traffic, but through roads are not absolutely necessary in this small area and the inhabitants would be quite content to have the alleys left as they are for passenger traffic, provided they were properly metalled and drained.

7 There are many inhabited rooms in this area which ought in the opinion of the Health Officer and his Deputy, to whom I have shown them, to be at once vacated as U. H. H. for want of light and air Many of these would be rendered habitable if the houses marked on the plan with blue crosses were demolished and the sites left as open chowks In my opinion no further measures than these would be necessary for the improvement of this area, if the law empowered the Health Officer to condemn individual rooms as U. H. H. and if site-owners when building new or re-building old houses could be compelled to make all rooms intended for human habitation comply with the 63½ rule

Bombay, 17th April 1912.

J P ORR

Chairman's Note on Telwadi Represented Area

1 The area represented by the Municipal Commissioner comprised the whole area between Kalbadevi Street, Sheik Memon Street and Vithalwadi. But the houses on these main roads are very big and very costly to acquire, and therefore the Land Manager suggested that the area to be dealt by the Trust should be confined to that shown within red lines on the plan.

2 This area is somewhat similar to Kolbhatwadi in its higgledy-piggledy arrangement of small houses without any good cross roads, but the main difference between Telwadi and Kolbhatwadi is that the inhabitants of the former are of a rather better class than those of the latter, and the larger houses in Telwadi have more ventilation chowks than those in Kolbhatwadi.

3 Possibly as in Kolbhatwadi the roads and lanes might be left as they are, but metalled and drained, but it would be better, if the cost is not prohibitive, to have at any rate one through road linking Mumbadevi and Agiary Streets.

4 If that is not considered absolutely necessary, it might suffice to demolish the houses marked with a blue cross so as to convert their sites into ventilation chowks, but it would also be necessary to require the owners of the very deep houses to enlarge their existing chowks, and the $63\frac{1}{2}$ ' rule should be enforced for all new or re-constructed buildings.

5 There would probably be many cases in this area in which rich owners of big houses would be glad to pay for the acquisition of smaller house sites in the vicinity in order to escape from having too many of their rooms declared U H H. for want of sufficient light and air.

J P ORR

Bombay, 17th April 1912

Chairman's Note on Umarkhadi Represented Area.

1 The area represented by the Municipal Commissioner is that part of the area within the red line on the plan, which lies South of Umarkhadi Road.

2 The area to the North of Umarkhadi Road within the red line was proposed to be included under section 25 on the ground that it was as much in need of improvement as the represented area. This additional area, together with the frontages immediately South of Umarkhadi Road, has quite different characteristics from those of the remainder of the represented area.

3 To deal first with the area on either side of Umarkhadi Road, the main defect here consists in the fact that most of the houses, though well lighted on the road-side, run very deep and have only very narrow intervening passages, with the result that, as most of them are 3 or 4 storeys high nearly

all the rooms, except those on the front and those on the top floor, are extremely dark, ill-ventilated and foul smelling, the basket privy system prevailing in this neighbourhood.

4 It will be seen from the yellow colour on the plan that a large number of houses were dealt with under the Epidemic Diseases Act ; but most unfortunately the owners generally took the opportunity to add one or more storeys and to build over what was previously open ground thereby making the lighting and ventilation of the lower and back rooms worse than ever.

5 There are large numbers of very dark rooms, which must be a hot-bed of disease and ought to be closed at once as U H H, though many of them were recently constructed in compliance with Municipal bye-laws

6 A description of the four worst cases has been separately circulated to the Trustees along with a model.

7 A glance at the plan would suggest that many houses might with advantage be demolished for the benefit of their neighbours, but local inspection leads to the conclusion that the alternative of closing insanitary back rooms might be preferred.

Some suggestions for demolition of houses or the back part of deep houses in order to form ventilation chowks are indicated by red hatching on the plan

8 In the North-West corner a few houses have in comparatively recent times been gradually extended backwards till they almost touch the houses behind them Here the necessary improvement can be effected without great expense by acquiring what were originally backyards, demolishing the buildings (mostly privies) in them, creating a service passage 10' broad and disposing of the remainder of the acquired area as privy sites

9 The southern half of the represented area differs from the northern, in that the houses though arranged in a higgledy-piggledy manner, are for the most part only one or two storeys high, and therefore do not block out light and air from one another to any serious extent Several of them have irregular but fairly adequate compounds round them. All that is necessary is to see that these compounds are not hereafter allowed to be overcrowded with building

10 In this area the Municipality have apparently, as indicated by the dotted red lines, a scheme of cross roads, in pursuance of which some setbacks have been enforced and three house sites have been cleared The visitor will at once see what an excellent effect the clearance of these house-sites has had on the ventilation of surrounding properties.

The acquired sites are also useful as play-ground for children who are quite safe there, as roads have not yet been made.

I do not think these roads are urgently required for traffic purposes.

11. I would leave the bulk of these houses as they are and would put restrictions on re-construction or addition to existing buildings so as to work for the future as near as possible to the $63\frac{1}{2}^{\circ}$ standard

J. P. ORR

Bombay, 25th April 1912.

*Chairman's note for Improvements Committee on Middle Colaba
Represented Area.*

1 It appears that some years ago the Municipality prepared a scheme for dealing with this area under the set-back sections, much as they did in Umarkhadi. The set back lines adopted by the Municipality are shown on the appended plan

2 The general idea seems to have been to preserve all the existing streets, but to make them considerably broader. If this scheme is fully carried out, the result will be a somewhat wasteful development with the proportion of road area to plot area unnecessarily high. The areas actually acquired by the Municipality in pursuance of this set-back scheme are shown in green colour on the plan. These acquisitions have resulted in very considerable improvement of the area by the creation of so many air spaces where houses previously existed, and there is comparatively little to be suggested now in the way of removal of obstructive houses. There are only 4 houses indicated by red hatching on the plan, which I would have demolished in order to form ventilation chowks. Over most of the area the existing houses are fairly regularly arranged along fairly straight lanes and streets. Some are objectionally close to one another but, as these are for the most part low houses, there is no such great objection to this as in areas where high houses are huddled together.

3 In my opinion, the wholesale demolition of houses in this area would be utterly unjustifiable, especially in view of the fact that, when in the not very distant future, the Cotton Green is transferred to Sewri, there will be a very large area of building land thrown upon the market in this neighbourhood.

4. Thomas Street provides sufficient facilities for through traffic between Colaba Road and Jamsetji Bunder, and so far as through traffic is concerned there doesn't seem to be any necessity for all the cross streets contemplated in the Municipal set-back scheme. The actual construction of the cross streets for which land has been acquired might be indefinitely postponed, and the areas acquired might be treated merely as ventilation spaces and metalled and drained. Nothing further is required in this area, if ill-lighted and ventilated rooms are closed and the $63\frac{1}{2}^{\circ}$ rule is insisted on when buildings are reconstructed or added to or new buildings are erected.

5 I would also draw attention to the necessity for care in disposing of sites acquired under the set-back sections, but not required for streets. I am pointing out to the Municipal Commissioner the case of some land proposed to be sold by the Municipality for the construction of a building adjacent to houses Nos 5 and 69. It would be far better if this site were sold to the owners of house Nos 5 and 9-11 on condition of his keeping it open or complying with the $63\frac{1}{2}^{\circ}$ rule in building on it. If the building for which the owner of house No 7 has sent in plans to the Municipality is allowed to be erected on it, the effect will be to shut out light and air from rooms in houses Nos 5 and 69, as these rooms, instead of abutting upon a broad street, will be shut in by the wall of the proposed new house with only a 2 feet passage traversed by open drains intervening.

J P ORR.

Bombay, 6th May 1912

Chairman's Note on Second Nagpada Represented Area

1 The Second Nagpada represented area forms part of the "new town" which was laid out in or about 1803, and it is evident that the town planners of that time merely laid down parallel streets with 120 feet spaces between them. Down the middle of these spaces a gully about 3 feet wide was kept and the spaces between the gully and streets were divided into house-sites, and apparently no limit was put upon the breadth of frontage, consequently the people who came to this quarter being very poor were content with very narrow houses, and several of the existing houses are as little as 10 or even 7 feet in breadth. Further, no limit seems to have been put upon the extent to which the house-site may be built over, and consequently nearly every house-site is now entirely built over and between the backs of adjacent houses is nothing but the 3 feet gully, though the buildings are often 40 to 50 feet high.

2 Large numbers of these houses are of very flimsy construction, so that it is dangerous to take down a part of the house lest the remainder or even the adjacent houses which it supports should fall down. Nearly all the houses are of framework construction, so that if the wood were sound, there would be no difficulty in cutting off the back parts of them, while a good many of those re-constructed in recent years have separate privy blocks in the rear, and these can be removed without difficulty.

3 From the appended plan it will be seen that large numbers of these houses have been dealt with under the Epidemic Diseases Act, but it will also be seen that at the same time the owners took the opportunity to add new storeys to their houses, thus making the lighting and ventilation of the backs of the houses more defective than ever, though the front rooms are still fairly well lighted as they abut on 26 feet roads.

4 There is a sprinkling of fairly substantial houses constructed in recent years on what were originally two or three adjacent house-sites but there are still 488 house-sites to be dealt with, and the task of acquiring these under the Land Acquisition Act would be enormous

5 I think it will suffice to broaden the gullies to 20 feet, by requiring every house-owner to demolish 8 to 10 feet of the rear of his house in most cases this will leave him about 50 feet in which to place on each floor one room facing the street, another facing the 20 feet gully, with a stack of W Cs and washing places in the middle of the house As things are, the depth of each house (from 50 to 60 feet) is occupied by 3 or 4 rooms on each floor, of which only the front room and sometimes the back rooms, or rooms opening on the chowks, on the top 2 floors are fit for human habitation. Every here and there it will be advisable to acquire and demolish whole houses, in order that their sites may be available for the owners of neighbouring houses, to erect W Cs and washing places, before they demolish the rear parts of their houses. These proposals will perhaps be better understood from a study of the plans B and C attached to Appendix A of my note on "Light and Air in Dwellings in Bombay," which will shortly be supplied to all Trustees.

J P ORR.

Bombay, 21st June, 1912

Chairman's Note on Kamatipura Represented Area.

1 Like the Second Nagpada, the Kamatipura represented area is laid out in parallel streets about 20 to 24 feet in width, but the spaces between them are only about 70 feet deep not as in Second Nagpada 120' In this depth there are two rows of houses, each about 34 feet in depth with a long narrow house-gully about 2 feet in width between them The area of each holding is very small, in most cases about 55 square yards, the entire area of each holding being built over with houses, generally not exceeding two rooms in depth, and having a ground floor and two upper storeys with stacks of privies along the 2 feet gully blocking out light and air from the back rooms Thus the Kamatipura houses are smaller in height, width and depth than those in Second Nagpada

2 The locality is notoriously unhealthy. This unhealthiness may be due to (a) the high sub-soil level, (b) the foul soil, (c) the bad habits of the people, or (d) insanitary buildings, or all these reasons combined

3 As regards the high level of the subsoil water, Mr. Baldwin Latham in his report on the sanitation of Bombay states "all those parts of Bombay, which are the most unhealthy, are, without exception, those into which, in addition to their own impure waters, the polluted underground waters, from other districts percolate and probably the most unhealthy district is that of Kamatipura The underground waters move from every direction towards

this place, and are actually used in it, in fact the ground waters in this particular district were found at the time of my inspection to be absolutely lower than the sills of the lowest sluice, and some feet lower than the ordinary channels by which such waters could escape to the sea."

4 As regards the foul soil, it is a question whether the site of Kamatipura or any portion thereof was originally reclaimed with kutchra. It is said that kutchra was met with in the foundation trenches of the Halalkhore chawl at Cursetji Suklaji Street, but it is not known whether it was confined to the site of that building, or extended to other parts of Kamatipura.

5 Most of the inhabitants of Kamatipura are poor. Their ways of living and habits are insanitary, and the long house-gullies between two rows of houses are used by them as depository for rubbish, and are moreover very foul from the overflow from privy baskets into them.

6 Of the causes of unhealthiness suggested in para 2 only (d), insanitary buildings, can be remedied or obviated by including the district within the limits of an ordinary Improvement Scheme, involving the demolition and reconstruction of all the houses; but the number of cases to be dealt with in such a scheme would be no less than 1,272, the gross cost of the scheme over 83 lakhs and the net loss nearly 40 lakhs.

7 Most of the existing houses are insanitary and of poor construction. To give an idea of the kind of properties in this district, a portion of the district situated between Kamatipura Centre and Bazaar Roads and Kamatipura 5th and 7th Lanes, has been selected, and important particulars in respect of these properties are given below.—

1	Percentage of open area for ventilation including half the area of surrounding streets to building area per cent	31
2	Average area of each holding sq yds	54
3	Average number of tenancies in each building . No	5½
4	Percentage of one-room tenements to total number of tenements per cent	83
5	Average area of each one-room tenement sq feet	100
6.	Average monthly rent do Rs	3 8
7	Increase in assessment since 1905 when the original estimate was framed per cent	76
8	Cost of acquisition per square yard on the assumption that the valuation equals 16½ years' purchase of the gross assessment Rs.	67

8 It will be seen from the preceding statement that the area available for ventilation is fair, thanks to the lavish provision of streets (which by the way is an offence against economic development); but the trouble is

that each building site is not only itself crowded with buildings but also closely surrounded with buildings so that back rooms are inadequately lighted

9 Wholesale demolition of all buildings and erection of new buildings of modern type will not only be prohibitively costly but will so change the character of the district that the present population cannot afford to continue living there and will have to be provided for elsewhere if overcrowding in adjacent localities is to be obviated. The best course under the circumstances is to devise a scheme involving removal of the minimum number of buildings necessary to render the remaining houses sanitary.

10. Most of the houses consist of rooms, one in front and the other in the rear, with nahan and privy accommodation in the rear abutting on the central house-gully. The front rooms are fairly well ventilated from the existing streets, but all the rear rooms are insanitary as their only means of ventilation, such as it is, is from the central house-gully. Thus practically 50 per cent of the rooms are insanitary, notwithstanding the fact that a large number of houses have been dealt with under the Epidemic Diseases Act

11 I think the most economical way of dealing with the improvement of this area is to adopt the method suggested in the case of 2nd Nagpada Scheme with some modification

12 In 2nd Nagpada I have suggested that the central gully should be widened to 20 feet by requiring every house-owner to demolish 8' to 10' of the rear of his house, leaving in most cases a depth of 50' in which to place on each floor one room facing the street and another facing the 20' gully, with a stack of water-closets and washing places in the middle of the house. But owing to the smaller depth of houses in Kamatipura, the above arrangement will be wasteful. As few of the houses are much above 30' in height the back gully may be broadened to 15' instead of 20', to admit of the ventilation of rear rooms of houses consisting of ground floor and two upper storeys. But if the extra width is got as in Nagpada by contributions from the houses on *both* sides the depth of each house will be curtailed by 6'-6" and will thus be reduced not to 50' as in Nagpada but to 27'-6", a depth insufficient to accommodate two rooms and a stack of privies and nahanes. It follows therefore that under this arrangement rear rooms would have to be abolished which means a reduction of 50 per cent in the number of existing rooms

13 The most economical arrangement is to deal with the houses in groups of three as follows —

- (a) to require the owners to demolish about 6½' of the rear of the 1st and 3rd houses,
- (b) the Trust to acquire the middle house, retain the front rooms, and demolish the rear rooms,
- (c) to locate on the site of these demolished rooms the privies and nahanes of all three houses

An explanatory plan illustrating these proposals is appended

14. Thus the expenditure on acquisition and reconstruction will be minimised, and above all only one-sixth of the existing number of rooms will have to be demolished instead of one-half, *vide* para 10. The present number of tenancies in two-thirds of the houses will remain as it is

J. P. ORR.

Bombay, 25th June 1912

Chairman's Note on Madanpura Represented Area.

1 The Madanpura represented area is in some respects similar to the Kolbhatwadi area, in so far as one of the chief sources of mischief is that the roads are very much neglected, being for the most part private streets and not kept in order by the Municipality. The houses, however, are arranged in a more orderly manner than in Kolbhatwadi, and for the most part they are low houses so that comparatively little harm comes from there being only narrow spaces between them.

2 A special feature of this area is that Mahomedan Street has been gradually raised to an unnecessarily high level, above the plinths of the houses, so that the ground floor rooms of some houses along it are on a lower level. Another common fault in this area is that the house gullies are in a very bad condition. I understand that this has been brought to the notice of the Health Department, but nothing has been done because it was supposed that the Trust would soon apply the wholesale demolition method to this area. If Mahomedan Street were lowered, the other streets metalled and otherwise put into order, and the house gullies thoroughly repaired, not much else would be required for the improvement of this area, beyond the closing of the interior rooms in the houses marked with red crosses and the removal of two obstructive houses hatched red on the plan.

3 The area surrounded by yellow lines on the map was acquired by the Municipality some years ago and laid out in plots which were sold for building purposes. Here and elsewhere in the represented area there is too much overcrowding of each house site with buildings: the harm done is not so great as in Telwadi, because the houses are not very high; but should the addition of new storeys be freely allowed, defects in lighting and ventilation would become very much worse than they are now.

4 It seems quite unnecessary to apply the wholesale demolition method to this area.

J P ORR.

Bombay, 1st July 1912

APPENDIX A-3.

(referred to on page 8)

No 14499 OF 1903-1904

FROM W. L. HARVEY, Esq, C I E, I C S,

MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY,

TO THE CHAIRMAN,

CITY IMPROVEMENT TRUST

MUNICIPAL COMMISSIONER'S OFFICE,

Bombay, 27th August, 1903

SIR,—I have the honour to inform you that the Executive Health Officer has recently addressed me on the subject of the measures to be adopted in future in dealing with plague in the City. These involve general sanitary improvements rather than direct methods of dealing with the disease and come for the most part within the scope of the Board's functions. I therefore forward * extracts from the Executive Health Officer's report and accompaniments for consideration of the Board with the following observations

2 A perusal of the papers will show that Dr Turner is of opinion that the plague measures recommended by the Indian Plague Commission, and now as far as possible in force, are not likely to suffice to extinguish the epidemic and that a more drastic remedy, involving the demolition of the most insanitary areas in the City, should be adopted without delay. His conclusions approximate closely to that of the Plague Commission, that no ordinary measures will stamp out the disease, and his proposals are directed in effect to the end which Government had in view in creating the agency of the Improvement Trust for the sanitary regeneration of the City, though his method of working would differ from that adopted by the Board. The Executive Health Officer proposes that semi-permanent dwellings should be erected as soon as possible for some 100,000 people, and that as these become available the most insanitary areas, of the worst of which he has given detailed information, should be demolished and acquired by the Improvement Trust, by Government or by the Municipality, and that in addition such houses as have become a source of danger or infection to neighbouring localities should be vacated and re-occupation prohibited until they have been so altered as to be fit for occupation; if this be not feasible they should be demolished. The Executive Health Officer is of opinion that this work should be undertaken along with that carried out by the Improvement Trust, but it is necessary to point out at the beginning that for financial reasons this is not practicable. The scheme is from every point of view a most ambitious one. The cost of housing alone, excluding that of the land required, would probably exceed a crore of rupees, and the cost of demolition and acquisition would be immense

* *Vide pp 28-31 infra*

The finances of the City, with the aid given by Government, will not admit of schemes on such a scale. The Improvement Trust was established as the best agency which could be devised for dealing with the improvement of the City in a comprehensive and reasonably rapid and economical manner, it receives a large subvention from the rates and has vested in it nearly all the vacant Government and Municipal lands in the City. It seems therefore that the real issue resolves itself into whether, from a sanitary point of view, the operations of the Improvement Trust are conceived on the best possible lines, or whether it might not be feasible to introduce changes with a view to the more rapid improvement of insanitary localities.

3 I am far from wishing to criticise adversely the line of action pursued by the Improvement Trust Board, of which I am a member, and with the general policy of which I have always been in accord. But I think there is hardly a member of the Board who would not agree with me in the statement that the commencement made was somewhat precipitate. The programme of works to be undertaken at once, comprising three street schemes and an improvement scheme had been drawn up and was accepted without question as feasible and proper, all the difficulties had not been foreseen or provided for, and the result is that the work done, though certainly beneficial and dealing with several insanitary areas, has not yielded that advantage as an actual plague measure which it was in the first instance undoubtedly intended to afford. This has of course been the subject of public criticism, and it is a fair question for consideration whether the immediate treatment of insanitary areas from which disease radiates to the surrounding localities is not of greater urgency than the construction of streets through the City. It will be seen that the fundamental difference between Dr Turner's proposals and the operations of the Trust lies in the answer to this question, and the points for determination are—(1) which line of action is the more beneficial, and (2) how far the Trust can now modify its course. The first of these points is one that should be settled by expert sanitary opinion. The second is for the Trust to consider. I am strongly of opinion, in view of Dr Turner's emphatic dictum that plague can only be dealt with successfully by what is practically wholesale evacuation and re-housing, that this matter should form the subject of enquiry and I am confirmed in this opinion by the belief that the original programme of the Board, which was no doubt drawn up on English models, did not take sufficient account of the fact that plague should have been one of the most important determining factors. I am also of opinion, if it has been the experience of the Trust that the cost of acquiring properties has been excessive and that instead of slum-owners bearing part of the cost of improvements, as they were intended to, they have here as elsewhere largely benefited at the expense of the general body of rate-payers, it would be advantageous to consider whether provisions similar to those contained in Part II of the Housing of the Working Classes Act should not form part of the powers given to them. At present action in this direction can only be undertaken under the Epidemic Diseases Act or Section 379 of

the Municipal Act Neither of these enactments is quite satisfactory, and Executive Officers must always be loth to close houses unless suitable accommodation is provided in substitution This would be done as a necessary complement of action taken under the Act referred to, if applied to Bombay, but cannot under existing circumstances be done by the Municipality, and nearly three years ago in a letter to Government I had already raised the question of placing these operations, which must be included in any complete sanitary code, on a permanent footing and transferring them to the agency already specially equipped for the purpose

4. Returning now to the details of Dr Turner's scheme, I have the honour to observe that before any action could be taken in the directions indicated, important questions connected with the moving of a large body of people would have to be fully considered and the cost of every step counted. I am afraid that the work done under English Acts since 1890 has not gone far to solve the economic difficulties involved, and the record of the operations even in London for nine years is very meagre in comparison with the vast population whose wants have to be supplied If people are to be moved in anything like the numbers contemplated by the Health Officer, there is no doubt that they must go to the north of the island, and I have no hesitation in saying that at present this could be effected in no other way than by compulsion. The land question here, as in all large cities, is a most serious—one might say an almost insuperable—difficulty, and of the areas mentioned by the Health Officer as fit for semi-permanent structures, probably very few of those in the proximity of the City proper could be made available The land at Mody Bay will be required for the new dock and that at Reay Road for the new railway and the accommodation of trades to be moved there in the immediate future, and all the well-to-do classes have protested against their ride, or promenade or playground on the Kennedy Seaface being utilized for the advantage of their less fortunate brethren My personal experience in plague work has made it clear to me how reluctant the working classes are to go to any distance from their work, even for a short time to camps, and this is, I believe, a generally observed fact in other places as well as here. This must hold specially good of that large class who earn a precarious living from day to day Assuming, however, that some considerable number of people could be transferred to the north of Dadar, and that the Railway Company could arrange for their transport, the question of cost will arise again It was laid down years ago by the English Royal Commission on the subject that the fares to be paid must not exceed the difference between the old and the new rent, and we might go even further and say that people will not be inclined to move unless there is a tangible saving Now allowing the bare interest and sinking fund on the money expended on building and, say, 4 per cent on the value of the land, it would not, I believe, be possible to provide rooms at less than Rs 2-8-0 per month, and as the cost of a railway ticket would be at least Rs 2 per month (electric trams could not compete) and rents in the town for the class referred to may be put at from Rs 2 to

Rs 3, it will be seen that so far from there being any saving to the working classes there would be a large increase. This would have to be made good either by employers of labour or assistance from the rates, and the cost, if large numbers were moved, would be quite prohibitive. It seems, therefore, that unless a new suburb for the well-to-do classes, which would naturally attract also many followers of the poorer class, be established in the north, the only course that could, with advantage, be followed would be to move, as far as possible, those whose work is already outside the densely populated areas, chiefly workers in mills. The Trust have for some time been negotiating with the Millowners' Association regarding this question, but nothing has been settled as yet, and this project, which is the one best calculated to give considerable relief from overcrowding in a short time, should not be delayed. If the millowners will not co-operate, the Trust should consider seriously whether they should not take independent action. Another serious difficulty that may be pointed out here is the necessity for securing the full benefits of such improvements as may be effected. It is quite reasonable to lay down that landlords must keep their houses in a structurally fit condition for human habitation, and on the other hand it is equally necessary to insist that the tenants for their part shall follow the essential rules of good sanitation. It has been pointed out over and over again by the Health Officer that the habits of the lower classes are such that the best possible building from a sanitary point of view would be converted by them in a short time into a most insanitary one. It follows, therefore, that systematic education by means of constant supervision must be afforded. I was, at first, for general reasons, opposed to the Trust going much beyond their obligation in the matter of housing the poor and labouring classes, but further experience has led me to believe that we cannot, as in other places, look for much assistance from companies and private individuals, and that, for the present at least, most of these measures must be undertaken or financed by public bodies, with such assistance as large employers of labour may be induced to give. This liability will naturally entail the establishment of an efficient managing and supervising agency, without which little good can be effected.

5 In the preceding paras I have to some extent indicated the obstacles which stand in the way of any very rapid improvement of existing circumstances in the City. The Corporation which has already handed over most of its landed property, and which makes a large annual contribution to the Improvement Trust, could not undertake an extensive scheme such as that suggested by Dr. Turner, and Government would probably be unwilling to supply the funds for a project which though beneficial might not in the end suffice to keep the City free from plague. It seems to me, therefore, that immediate measures on a large scale are not feasible. But, as I have already stated, there seems to be a case for enquiry as to whether the operations of the Trust should not be modified so as to admit of more insanitary areas being dealt with in detail in the near future. I am doubtful whether the difficulties I have touched on in the way of re-housing will not prevent such rapid progress

as the Executive Health Officer considers possible, but it seems desirable that the whole subject should now be discussed. It has been and is in my power and that of the Corporation to bring the subject before the Trust by means of a series of official representations, but we know the hands of the Trust have been very full and we have refrained from embarrassing them. It is, however, the duty of the Executive Health Officer to make complaints regarding insanitary areas, and the function of the Trust to deal with them if possible, and as the subject has now been raised it seems to me to be the best course to lay it before the Board and invite their serious consideration of it. The points that present themselves to me are chiefly the following —

- (1) Whether it is desirable and possible to suspend for a time the construction of the thoroughfares in Schemes II and III, leave the better houses standing and deal with the most insanitary areas only in the schemes
- (2) Whether, if the above can be effected, the Trust would be able to undertake a number of small improvement schemes, providing for the people displaced
- (3) Whether the provisions of Part II* of the Housing of the Working Classes Act should not be adopted and applied to Bombay, inasmuch as individual houses may from being plague centres be dangerous to the localities in which they are situated
- (4) That the question of housing in the north of the island as large a proportion as possible of the people who work there should be taken up at once
- (5) That Schemes V and VI of the Improvement Trust should be expedited
- (6) Whether in re-housing schemes the height of houses should, as recommended by the Executive Health Officer, be limited to two floors

6 If after enquiry the Trust find themselves in a position to proceed with further improvement schemes, the necessary official representations will be made

I have the honour to be,

Sir,

Your most obedient servant,

W. L. HARVEY,

Municipal Commissioner for the City of Bombay.

* *Vide pp. 32 & infra.*

ACCOMPANIMENT TO APPENDIX A-3.

(referred to on page 23)

No 2085P OF 18-7-1903

To

THE MUNICIPAL COMMISSIONER

FOR THE CITY OF BOMBAY.

SIR,—I have the honour to submit the accompanying * report on the plague measures that are necessary to be taken in the City for combating the next cold weather epidemic. Government and the Municipality have been spending year by year thousands of rupees on camps, and my proposal to provide semi-permanent structures will, in the long run, be economical. My proposal is that the Municipality and Government should provide for poor people in addition to what the Improvement Trust will be doing. If the scheme be left entirely to be done by the Improvement Trust, it will take some years, and my object is that we should work in co-operation with that Body, and every possible attempt should be made to relieve the poor and improve the sanitary condition of the City. Anything that we undertake should be undertaken with the least practicable delay.

The houses such as I propose, a plan and sketch of which Mr Murzban is kindly preparing for me, should not cost more than Rs 400 to build, and being of brick and cement would be practically a permanent building. If Rs 2 per mensem were charged, the income derived would pay over 5 per cent. In addition to the cost of building the value of the land would have to be taken into account, which would reduce the rate of interest to 4 or 3½ per cent on the outlay, this should be considered quite reasonable considering the object in view, and if Rs 2-8-0 were charged, which is low compared with rents in the overcrowded parts, the income derived would well repay the capital expended. Added to this, it should be borne in mind that the annual expenditure on plague measures, camps, rents, etc, which comes to nearly 3 lakhs, would be reduced and that schemes for improving the City cannot all be considered to be profitable investments, and that where money is made in one direction it should go to balance any deficit in an improvement in another, the whole object being to improve the condition of the City to the best advantage at the least possible expense.

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I have, etc,

(Sd.) J A TURNER,

Executive Health Officer.

*Health Officer's report on Control of plague in Bombay.**(referred to in Health Officer's No 2085p on p 28.)*

In my last quarterly report I merely focussed, as it were, the situation with a view to bring prominently into notice that plague when thoroughly established thrives when suitable conditions are provided for its sustenance, when the people are overcrowded, when the sick and healthy live together, when conditions of climate, atmosphere and temperature and moisture favour its propagation, and when the habits and customs prevent measures being taken to control the spread of the disease. I will not waste time by pointing out what is done in countries where these conditions do not exist, and where every detail of sanitation is most rigorously enforced. Comparison between the conditions existing in Bombay and Europe, America, Australia or Cape Town cannot be made. In those countries when an outbreak of dangerous disease occurs there is no opposition to carry out the measures for its prevention, on the other hand any weakness on the part of the administration brings forth an outcry and demand for strong measures which no Government can withstand. I now deal specifically with the subjects under two headings—

- 1 The measures that should be adopted to remedy the existing conditions in the City
- 2 What should be done to investigate the cause of the spread of plague in all its bearings—Pathological, Clinical and Sanitary—Preventive and Curative

In my report I said that we had to deal with plague now as endemic in Bombay, and pointed out that, in order to make any impression on the seasonal incidence of the disease, the class of people who suffered most from its ravages should be removed and housed in such a manner that their surroundings could be regularly supervised, that the houses in which the poor live, have become foci of infection and should be demolished or rendered fit for habitation, and nothing short of removing the cause will have any effect in checking the disease which has existed here for so many years. These are measures which, I maintain, are absolutely necessary in the interest of the City, having regard to existing circumstances.

The removal of plague-infected quarters, the opening out of overcrowded areas, stricter attention to cleanliness, removal of offensive matters, sewage and subsoil water and the enforcement of the Act and bye-laws with regard to exposure of the infected person or things and more stringent regulation for ascertaining the presence of the disease and the true cause of death, are essential. The poor of Bombay now live an artificial life in houses and under conditions to which they are unaccustomed and unsuited, and which render any attempt at sanitation most difficult. What the people want is smaller houses with one or two floors, through ventilation of each room and free air in front and rear, a street at least 40 feet wide at the front and in the rear open space of not less than 20 feet, the sanitary conveniences and washing places built between each row of houses and detached therefrom.

It is the custom of the working classes here to live and cook and sleep in the same room. This should be prevented by providing a small cook-room for each family. The water-supply should be provided outside the house. There should be no *nahanis* or washing places or privies inside the house, and the floors should be of impervious material at least 3 feet above the ground. The large chawls of four and five floors separated from one another by narrow gullies and containing 200 and 300 rooms with a population of several hundreds of people living under the most insanitary conditions as to air, space, light and the presence of filth inside and around the rooms, constitute in themselves a source of danger to health, and when an outbreak of plague or other dangerous infectious disease occurs either by being introduced by human agency or animal agency or dust or filth, the disease will spread rapidly amongst the inmates who are huddled together in a very limited area in contravention of all sanitary principles, and whom once the disease gets its foothold it is difficult to displace.

The occupation of chawls of many floors and rooms is opposed to the habits of the people of an Eastern city. The population cannot be supervised or regulated. Every room in a house is occupied by one or two families, all the refuse and water is thrown out of the window into the street and gullies, intercommunication between families when infectious disease occurs is impossible to control, isolation of a case of infectious disease cannot be carried out. The sanitary arrangements are not suited to the people, water pipes and drain pipes, soil pipes and house drains, ventilating shafts and gully traps, syphons and intercepting chambers are foreign to the native. Everything should be of the simplest and most easily worked. Small rows of buildings should be erected on sites quoted below, with free air, space, light and proper sanitary arrangements. What I advise is, that all the most insanitary areas be demolished and acquired by the Municipality or Government or Improvement Trust. All those houses which are hotbeds of disease and are in the opinion of the Health Officer unfit for human habitation be vacated and not allowed to be occupied until a certificate is produced that they have been made fit for human habitation or newly built.

I specify the areas which are in most urgent demand for improvement and places where houses can be erected by the Improvement Trust, Municipality, private enterprise or employers of labour.

Semi-permanent accommodation should be provided for 100,000 people, and the land included in Scheme No 5 of the Improvement Trust appears to be the only possible place where this could be done, and then only if taken in hand at once, and the low lands drained by large open drains and the low-lying parts filled in, and the houses raised well above the surface of the ground. The presence of the drain should be less malarious than an ill-kept swamp and could be more easily supervised and regulated, and can be eventually covered in. Increased facility for transit by railway and trams must be given,

and the advantages of more healthy and cheaper houses offered to the people to induce them to reside there.

This is in addition to what the Improvement Trust will be doing. I understand that they have under consideration a scheme for providing semi-permanent buildings on the vacant land of Kennedy Sea-face and in Agripada.

I do not propose in this report to deal with the whole of the City at once, fearing lest the magnitude of the work would swamp the object in view. I therefore specify certain insanitary plague-infected areas in A, B, C and E Wards in order to explain my scheme for dealing with the conditions affecting the health of the people. My proposal is that sanitary dwellings be provided for at least 100,000 persons, and that the houses which are year by year infected with plague be evacuated early and that those that are unfit for habitation be condemned, and those that can be made fit for habitation be improved and re-occupied. By "unfit for habitation" I mean that houses or areas where plague occurs, and which are insanitary as to ventilation, light, dampness, obstruction to air and light, insufficient cubic space in and around the dwellings and without proper sanitary conveniences and drainage, be condemned on the report of the Health Officer.

As, however, these improvements in the sanitation of the City will be gradual, I propose, if necessary, to ask for an increased staff of scavengers, carts, halalkhores, drain-cleaners and gully-flushing engines and disinfectants, and as soon as the rains cease, to systematically deal with every area in which plague is likely to occur. Every house which is overcrowded and badly lighted or badly ventilated will be cleaned, disinfected and white-washed, rooms insufficiently lighted or ventilated will be improved. By these means we shall be able to determine the relation of filthy and overcrowded areas to disease. I have already paved the way in this direction, and the Divisional Health Officers, the District Registrars and the Nurses report to me daily on insanitary conditions, and reports are forwarded to the Executive Engineer, who can only deal with a limited number. If my suggestions are carried out, the staff working under the Executive Engineer will be increased, and their instructions will be to deal at once with houses reported on by the Health Officer as being in urgent need of attention.

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(Sd) J A TURNER, M B, D.P H,

Executive Health Officer for the City of Bombay.

ACCOMPANIMENT TO APPENDIX **A-3***(referred to on pages 2, 4, 8 & 27)**Précis of the Housing of the Working Classes Act, 1890 Part I—
Unhealthy Areas*

Action is to be taken on a representation (section 5), the representation is to be taken into consideration by the Local Authority (section 4), who, if satisfied, may pass a resolution declaring the area an unhealthy one needing to be dealt with under an Improvement Scheme. Thereafter the scheme is to be drawn up (section 6), notified and owners to be served with notices (section 7)

After compliance with the above, the Local Authority must apply to the Local Government Board, or to a Secretary of State if the part dealt with lies within the County of London, for a confirming order to the scheme

If the confirming Authority thinks fit, it may order a local enquiry to be made and may pass a provisional order authorizing the execution of the scheme (section 8). Such a provisional order requires the confirmation of an Act of Parliament [section 8 (6)]

In all the above respects the general scheme of operation is practically similar to that laid down in our own Act.

Part II—Unhealthy Dwelling Houses

It is the duty (section 30) of the Health Officer to represent to the Local Authority existence of houses which he thinks unfit for human habitation. Householders may also make similar representations (section 31)

It is the duty (section 32) of the Local Authority to take proceedings for closing houses which are U H H, either on their own initiative or on the report of the Health Officer or on information given under the third schedule of the Act. The third schedule lays down that the nuisance authority shall serve a notice on the owner or occupier of the premises to abate such nuisance and to carry out the works set out in the notice. If the nuisance is likely to recur, or if the house is considered unfit for human habitation, a complaint shall be laid before a Justice of the Peace, who will summon the owner or occupier to appear before two Justices in Petty Sessions, who will enquire into the complaint, and, if the nuisance is proved to exist, may prohibit the use of the premises until, in their judgment, the premises have been rendered fit for human habitation, in which event the previous order will be determined and the house may be declared fit for human habitation

These are the rules for the County of London, others are prescribed for other parts of the United Kingdom

During the currency of a closing order if the house has not been rendered fit for human habitation, or if the necessary steps are not being taken to this end, the Local Authority must pass a resolution that it is expedient to order the demolition of the building (section 33).

Notice of such resolution is to be served on the owner [section 33 (21)] appointing a date for the further consideration of the resolution, on which date the owner may attend and object to the demolition. If upon consideration of the resolution and the objections made by the owner the Local Authority decide that it is expedient to demolish the building, then, unless the owner undertakes to forthwith make the building fit for human habitation, the Local Authority shall order the demolition of the building [section 33 (3)]. If the owner undertakes as aforesaid, but does not carry out the work by due date, the Local Authority must order the demolition of the building.

An appeal to Court of Quarter Sessions lies from all orders passed by the Local Authority under this part of the Act (section 35).

The Local Authority shall, on application, make an order charging on the building an annuity to repay the amount of the cost of rendering a building fit for human habitation on being satisfied as to the works executed, cost, etc., (section 36). The annuity must be at the rate of 6 per cent on the cost, for a term of 30 years.

If a building, not in itself U. H. H. is so situated as by its position, etc., to stop ventilation or otherwise to make other buildings U. H. H. or to prevent measures from being carried into effect for remedying nuisances, the Local Authority may take into consideration representations from a Health Officer or from four inhabitants stating that the obstructive building should be pulled down (section 38). The Local Authority, after obtaining a report upon the condition of such building and upon the cost of pulling it down and acquiring the site, are required to supply such report, etc., to the owner and to notify him of the date on which they will consider the matter [section 38 (3)]. The owner may attend and state his objections, and the Local Authority must pass orders either allowing the objection, or directing the building to be pulled down. An appeal lies to the Court of Quarter Sessions.

Then follow certain clauses dealing with the acquisition of the site by the Local Authority, its retention by the owner, its use for public purposes, its sale to owners of adjacent properties, the settlement of compensation for the building and the site, the apportionment of the cost of demolition to the owners of buildings which have increased in value by reason of such demolition, etc., etc.

Among the provisions of these clauses one [section 38 (7)] is specially important; under it the Local Authority is empowered to acquire part of a house or manufactory, and it is not competent for the owner to insist upon the whole of his holding being taken. The owner is to be awarded compensation for the part taken, and may be awarded compensation for severance.

if deemed necessary by the Arbitrator. Such a provision would materially modify section 49 of the Indian Land Acquisition Act.

Scheme for Reconstruction —Under section 30 the procedure to be undertaken in dealing with individual houses and areas which are too small to be dealt with as an unhealthy area under Part I of the Act are laid down. The procedure in a general way follows the lines specified under Part I.

Settlement of Compensation —The amount of compensation is to be settled by an Arbitrator appointed by the Local Government Board, and his awards are final and binding on all parties [section 41 (11)]. The considerations to be taken into account in settling the compensation are practically the same as those laid down in sections 47 and 49 of our Act.

Expenses and Borrowing —Then follow provisions regarding the raising of funds for meeting charges incurred under this part of the Act, submission of accounts, etc., regarding which no details need be given, as our Act provides fully for them.

Powers of County Councils.—Under sections 45 and 46 there exist provisions for County Councils undertaking the execution of schemes when the Local Authority has failed to carry them out, charging the Local Authority with the whole or part of the cost.

APPENDIX **A-4.***(referred to on pages 4 & 8)**Extract sections 17 and 18 of the English Housing and Town Planning Act, 1909*

17. (1) It shall be the duty of every Local Authority within the meaning of Part II of the principal Act to cause to be made from time to time inspection of their district, with a view to ascertain whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and for that purpose it shall be the duty of the Local Authority, and of every officer of the Local Authority, to comply with such regulations and to keep such records as may be prescribed by the Board

Duty of Local Authority as to closing of dwelling house unfit for human habitation.

(2) If, on the representation of the medical officer of health, or of any other officer of the authority, or other information given, any dwelling-house appears to them to be in such a state, it shall be their duty to make an order prohibiting the use of the dwelling-house for human habitation (in this Act referred to as a closing order) until in the judgment of the Local Authority the dwelling-house is rendered fit for that purpose.

(3) Notice of a closing order shall be forthwith served on every owner of the dwelling-house in respect of which it is made, and any owner aggrieved by the order may appeal to the Local Government Board by giving notice of appeal to the Board within fourteen days after the order is served upon him.

(4) Where a closing order has become operative, the Local Authority shall serve notice of the order on every occupying tenant of the dwelling-house in respect of which the order is made, and, within such period as is specified in the notice, not being less than fourteen days after the service of the notice, the order shall be obeyed by him, and he and his family shall cease to inhabit the dwelling-house, and in default he shall be liable on summary conviction to be ordered to quit the dwelling-house within such time as may be specified in the order

(5) Unless the dwelling-house has been made unfit for habitation by the wilful act or default of the tenant or of any person for whom as between himself and the owner or landlord he is responsible, the Local Authority may make to every such tenant such reasonable allowance on account of his expense in removing as may be determined by the Local Authority with the consent of the owner of the dwelling-house, or if the owner of the dwelling-house fails to consent to the sum determined by the Local Authority, as may be fixed by a court of summary jurisdiction, and the amount of the said allowance shall be recoverable by the Local Authority from the owner of the dwelling house as a civil debt in manner provided by the Summary Jurisdiction Acts.

(6) The Local Authority shall determine any closing order made by them if they are satisfied that the dwelling-house, in respect of which the order has been made, has been rendered fit for human habitation

If, on the application of any owner of a dwelling-house, the Local Authority refused to determine a closing order, the owner may appeal to the Local Government Board by giving notice of appeal to the Board within fourteen days after the application is refused

(7) A room habitually used as a sleeping place, the surface of the floor of which is more than three feet below the surface of the part of the street adjoining or nearest to the room, shall for the purposes of this section be deemed to be a dwelling-house so dangerous or injurious to health as to be unfit for human habitation, if the room either—

(a) is not on an average at least seven feet in height from floor to ceiling, or

(b) does not comply with such regulations as the Local Authority, with the consent of the Local Government Board, may prescribe for securing the proper ventilation and lighting of such rooms, and the protection thereof against dampness, effluvia or exhalation provided that if the Local Authority, after being required to do so by the Local Government Board, fail to make such regulations or such regulations as the Board approve, the Board may themselves make them, and the regulations so made shall have effect as if they had been made by the Local Authority with the consent of the Board

Provided that a closing order made in respect of a room to which this sub-section applies shall not prevent the room being used for purposes other than those of a sleeping place, and that, if the occupier of the room after notice of an order has been served upon him fails to comply with the order, an order to comply therewith may, on summary conviction, be made against him

This sub-section shall not come into operation until the first day of July Nineteen Hundred and Ten, and a closing order made in respect of any room to which this sub-section applies shall not be treated as a closing order in respect of a dwelling-house for the purposes of the next succeeding section.

Order for demolition.

18 (1) Where a closing order in respect of any dwelling-house has remained operative for a period of three months, the Local Authority shall take into consideration the question of the demolition of the dwelling-house, and shall give every owner of the dwelling-house notice of the time (being some time not less than one month after the service of the notice) and place at which the question will be considered, and any owner of the dwelling-house shall be entitled to be heard when the question is so taken into consideration

(2) If upon any such consideration the Local Authority are of opinion that the dwelling-house has not been rendered fit for human habitation, and that the necessary steps are not being taken with all due diligence to render it so fit, or that the continuance of any building, being or being part of the dwelling-house, is a nuisance or dangerous or injurious to the health, of the public or of the inhabitants of the neighbouring dwelling-houses, they shall order the demolition of the building

(3) If any owner undertakes to execute forthwith the works necessary to render the dwelling-house fit for human habitation, and the Local Authority consider that it can be so rendered fit for human habitation, the Local Authority may, if they think fit, postpone the operation of the order for such time, not exceeding six months, as they think sufficient for the purpose of giving the owner an opportunity of executing the necessary works

(4) Notice of an order for the demolition of a building shall be forthwith served on every owner of the building in respect of which it is made, and any owner aggrieved by the order may appeal to the Local Government Board by giving notice of appeal to the Board within twenty-one days after the order is served upon him

APPENDIX A-5

(referred to on pages 4 & 8)

Extract section 38 (8) of the English Housing of the Working Classes Act, 1890

Where in the opinion of the arbitrator the demolition of an obstructive building adds to the value of such other buildings as are in that behalf mentioned in this section, the arbitrator shall apportion so much of the compensation to be paid for the demolition of the obstructive building as may be equal to the increase in value of the other buildings amongst such other buildings respectively, and the amount apportioned to each such other building in respect of its increase in value by reason of the demolition of such obstructive building shall be deemed to be private improvement expenses incurred by the Local Authority in respect of such building and such Local Authority may, for the purpose of defraying such expenses, make and levy improvement rates on the occupier of such premises accordingly; and the provisions of the Public Health Acts relating to private improvement expenses and to private improvement rates, shall, so far as circumstances admit, apply accordingly in the same manner as if such provisions were incorporated in this Act

APPENDIX B.

(referred to on page 4)

Note on the progress made towards amendments of Municipal bye-laws as to air space about buildings

1. The Committee appointed by the Corporation on the 22nd January 1912 to report on Mr Dunn's proposals for securing adequate open space around buildings held 2 meetings in 1912, 3 in 1913 and 2 in 1914 and ultimately on 15th September 1914 submitted a report (printed below) recommending the Corporation to get certain amendments made in the Municipal Act and Bye-laws

2 They recommended *inter alia* that the 63½° rule should be gradually applied to old buildings whenever they were enlarged, reconstructed or subjected to substantial alterations The Corporation on 12th October 1914 referred this recommendation back to the Committee for reconsideration, and adopted the other recommendations and the Committee have so far held 2 meetings for the further discussion of this subject

3 The other recommendations made by the Committee were approved by the Corporation and the Commissioner was asked to submit a draft of the proposed amendments of the Act and Bye-laws The Commissioner's report on two of the proposed amendments of the Act is before the Corporation for discussion in their June Meeting The further amendments of the Act and Bye-laws are still under the consideration of the Municipal Solicitors.

4 The only recommendation of the Committee which has been carried into effect is the amendment of Bye-law 41 (1) (a) increasing the minimum open space required along the sides of buildings

Accompaniment to note on page 38

Report of the Committee of the Corporation regarding the Amendment of the Municipal act so as to obtain power for regulating Building operations with a view to preventing the formation of insanitary areas within the City.

Bombay, 15th September, 1915

That with a view to preventing as far as possible the formation of insanitary areas within the City in future, this Corporation are of opinion that the Bombay Municipal Act of 1888 requires amendment in order to ensure —

- (a) that buildings thereafter constructed shall abut upon a sufficiency of open space whether exterior or interior,
 - (b) that the extent to which any site may thereafter be legally covered by buildings shall be limited to such proportion of the whole area of the site as may secure a sufficiency of light and air to the intended building as well as to buildings adjacent thereto
- 2 That the President be asked to address Government accordingly with a request that the necessary amendments may receive very early consideration.

The Committee appointed by Corporation Resolution No. 5862, dated the 22nd January 1912, and reconstituted by Corporation Resolution No 140 dated the 7th April 1913, to report on the marginally noted proposition moved by Mr G O W Dunn, regarding the amendment of the Municipal Act so as to obtain power for regulating building operations with a view to preventing the formation of insanitary areas within the City, beg to submit the following report

2 It will be observed that Mr Dunn confined his attention to buildings to be constructed hereafter, but the Committee have found it desirable to make recommendations covering both existing and contemplated buildings. It is at least as important to prevent things going from bad to worse in areas already built over as to secure the sanitary development of areas not yet built over

3 Most of the requisite improvements can be effected by amending the bye-laws. The only amendments of the law that the Committee consider necessary are—

- (a) The amendment of section 378 of the Municipal Act so as to make it clear that individual rooms in a building may be declared U. H. H. and treated accordingly even when the majority of the rooms in the building are fit for human habitation.
- (b) The amendment of section 342 so as to require owners to give notice to the Municipal Commissioner under that section before putting any fixed partition into a room so as to sub-divide it into two or more rooms
- (c) The enactment of provisions requiring the owner of an existing estate to submit for the Municipal Commissioner's approval plans showing how the estate is to be laid out with streets, building sites, open spaces to be kept free of building, etc., before commencing building operations or sub-dividing the estate.

4 As regards (a) it is notorious that many houses in the more congested parts of the City contain interior rooms which depend for their lighting and ventilation on extremely narrow gullies into which but little light ever penetrates. The air in these gullies is usually stagnant and is vitiated by gases emanating from foul sullage in open drains and fermenting refuse thrown from rooms abutting on them. If all the rooms in a house were of this character, the house would be condemned at once as U. H. H. under Section 378, but practically all houses containing such rooms contain also a certain number of front rooms which get adequate light and air from the street; and as section 378 now stands the existence of these few good rooms prevents the Municipal Commissioner from declaring the house as a whole U. H. H., and he has no power to treat the bad rooms as U. H. H. This is a serious anomaly which ought to be removed. Among the papers attached to this report being the more important of the reports and notes that the Committee have considered in the course of their deliberations is a letter, dated the 16th April 1913, from the Association of Bombay Architects, Civil Engineers and Surveyors, in which will be found the same recommendation as the Committee make for the amendment of section 378. Obviously such an amendment is of great importance in a City like Bombay in which no less than 80 per cent. of the population live in one room tenements. The Committee think that the object in view can be secured by the insertion of the words "or part of a building" after the word "building" wherever it occurs in section 378, and they think that the Commissioner should be required to inform the party what are the causes which in his opinion render the building or part of the building U. H. H.

5 As regards (b) it has been brought to the notice of the Committee that there are many cases in which a large room well lighted from a street has been sub-divided by partitions into several rooms, only one of which abuts on the street, while the others have either no opening or an inadequate opening into the external air. It is apparently becoming the practice to design rooms with the object of thus sub-dividing them after the building is complete, it is obvious that such sub-divisions may entail the most insanitary conditions, though sometimes they may be harmless, and the Committee's recommendation aims at making them subject to the Commissioner's approval.

6 As regards (c), the Committee find that much of the congestion and confusion of buildings in Bombay is the result of the gradual dismemberment of what once were large estates by sale or transfer of a portion here and a portion there in a haphazard manner without consideration of the necessity of orderly development to ensure that every portion shall be properly served by roads, air spaces, etc. This is prevented in other countries by provision of the kind the Committee recommend for securing to the Local Authority a certain measure of control over the development of private building estates.

7. When the bye-laws were recently revised, it was understood that the operation of bye-law No 41 would secure sufficient open space outside the living rooms. The Commissioner however mentions in his letter No 24363, dated the 14th March 1912, instances of houses which are objectionable from a sanitary point of view although built or altered in accordance with the existing bye-laws. He also quotes instances in which the existing bye-laws could not be enforced. After careful consideration, the Committee recommend as a remedy for these evils the adoption of what is known as the $63\frac{1}{2}^{\circ}$ rule in lieu of the existing bye-law No 41. Roughly this rule requires that the open space between two houses which have rooms depending on that space for their lighting and ventilation shall be at least half as broad as the higher of the abutting houses is high, so that the lowest rooms receive light at an angle of 2 to 1. This principle is applied to all rooms whether the space they abut on is in front or in rear or at the side of the house or is an interior court-yard, and combined with the prescription of certain minimum breadths for rear and side open spaces and interior court-yards it is found to work well with the result that all rooms receive ample light and air. The rule should be applied not only in the case of new buildings but also in the case of old buildings whenever they are enlarged, reconstructed or subjected to substantial alterations which are not of the nature of necessary repairs.

8. It would be unfair to an owner who has recently built a new house in accordance with the 1910 bye-laws to call upon him to increase the open spaces on his site either at once or when he is, for instance, repairing a window, but the bye-laws the Committee recommend involve no such interference. Following the principle that any aggravation or extension of existing evils must be prevented they make any addition to the building impossible except on the condition that the whole building be brought into conformity with the latest bye-laws, but so long as the building remains substantially unaltered they leave it alone.

9. Again in the case of a gully which has to be broadened it would be unfair to require the whole of the broadening to be carried out on the site on which an abutting building is first to be reconstructed and to require no set-back on the opposite site, and where a vacant site has an old building right on its boundary it would be unfair to require a new building on that site to be set-back for the benefit of the old building so as to provide between the old and new buildings the full space required by the $63\frac{1}{2}^{\circ}$ rule, but the $63\frac{1}{2}^{\circ}$ rule makes allowance for these conditions, it aims at broadening the open space gradually. Between two houses of equal height it requires an intervening open space half as broad as the houses are high, and the rule is deemed to be satisfied if the owner of one house leaves on his site half this space in anticipation of the owner of the other providing the other half on his site when his house is altered, so that ultimately each house benefits by the neighbour's set-back and enjoys the full open space required by the $63\frac{1}{2}^{\circ}$ rule.

10. The Executive Engineer has brought to the notice of the Committee that much of the disorderly development of back lands is due to want of adequate control over the extent of building thereon and of access thereto; that while section 349 B limits the height of houses which abut on streets there is no corresponding limit for houses on back plots which do not abut on streets; that bye-law 45, the only one dealing with means of access, is satisfied if an owner intending to build on a back plot can show that there is an 8 feet path, however long and meandering and unsuitable, from a street to the door of the proposed building; and that consequently he daily has to pass plans which he considers most objectionable, as tending to the ultimate formation of new slums in what are now back lands without a proper service of streets. A remedy will be provided when the law is amended as suggested in paragraph 6 above, but meanwhile the Committee think it important that the bye-laws should enforce the provision of adequate open space along the whole front of every house. The Committee therefore beg to recommend that the bye-laws should specifically prescribe that every house shall throughout its frontage abut on a permanently open space at least half as broad as the house is high, such space being an appurtenance of such house alone and of no other. Then if away from a street two houses, say 40' high, are proposed to be erected facing one another, each will have a 20' strip open on its own site, so that there will be 40' between the houses and a 40' street can ultimately be constructed without demolishing any building.

11. The malpractice of sub-division of rooms to which the Committee have already referred in paragraph 5 above is facilitated by the inadequacy of section 348 (1) (j) of the Municipal Act and the last clause of bye-law 42. These require a room to be provided with means of lighting and ventilation in an external wall in the shape of doors and windows aggregating in area at least one-fourth of the area of the external wall. No difference whatever is made between a room which extends only 10' from the external wall and one which extends 50' from it. This anomaly will be removed if a bye-law is made providing that every living room shall have a wall abutting on a $63\frac{1}{2}$ ' light plane which has a permanently open air space above it, and requiring (i) that at least one-fourth of the area of such room-wall shall be occupied by doorways, windows or other openings for the admission of light and air, and (ii) that the aggregate area of all such openings into the room from such light planes shall be at least equal to one-seventh of the floor area and shall include an area at least equal to one-fifteenth of the floor area, through which light will still penetrate when the doors are shut.

12. The Executive Engineer complains that he is unable to fully understand a builder's intention for want of elevations and roof plans and he requests that a bye-law be framed requiring builders to submit elevations and roof plans in addition to the plans they now submit. The Committee think they should be provided.

13. The Committee have not attempted to draft the bye-laws they propose, they have merely indicated the sense in which the existing bye-laws should be modified. They therefore beg to recommend the Corporation to adopt this report and to request the Commissioner to prepare in consultation with the Municipal Solicitors a draft of the proposed bye-laws and to submit it for the approval of the Corporation.

14. The Committee anticipate that the preparation and consideration of this draft will take a very long time and that meanwhile if bye-law 41 is left unaltered, a large number of new buildings will be erected with inadequate open spaces around them. To prevent this the Committee beg to recommend that a simple amendment of bye-law 41 (1) (a) should be carried through as a separate matter with the least possible delay. The open spaces prescribed for chawls in bye-law 41 (1) (a) are by no means excessive, and the Committee can see no good reason why the standard of lighting and ventilation enforced in the case of chawls should not be enforced in rooms for human habitation in all other buildings also. The amendment which the Committee recommend for immediate adoption is, therefore, that the table of dimensions of open spaces prescribed in bye-law 41 (1) (a) in the case of chawls be made applicable to all dwellings

APPENDIX C.

(referred to on page 5).

EXCERPT from the proceedings of a meeting of the Trustees for the Improvement of the City of Bombay, held on the 30th May 1913.

7 Considered, in continuation of Trustees' Resolution No 97 of 6th May 1913, the following Report No I, dated 27th May 1913, of the Improvements Committee on an Improvement Scheme in 2nd Nagpada —

2nd Nagpada Improvement Scheme.

We have considered the accompanying report* No 5318 of 24th May 1913 from the Deputy Land Manager with the Chairman's minute of 26th May 1913 thereon

We approve the Improvement Scheme for a portion of 2nd Nagpada described in the report. It is framed on the lines contemplated by Government for the improvement schemes for which their special grant of 4 lakhs was recently allotted. It is estimated to involve an outlay of Rs 10,00,000 and a nett loss of Rs. 5,17,400, which is more than covered by the 4 lakhs plus savings on the forecast for 1912-13.

* Vide pp 44 5 *infra*.

The Chairman has shown in paras 11, 12 and 13 of his minute* that the three essential conditions preliminary to notification are satisfied, viz —

- (i) the area has been represented by the Municipal Commissioner under section 24 of the Bombay City Improvement Act ,
- (ii) the truth of the representation is beyond doubt ,
- (iii) the Board have sufficient resources for the execution of the scheme , and we accordingly recommend the Board to approve and adopt the scheme and have it notified under section 27 of Bombay City Improvement Act

Report from the Deputy Land Manager.

(referred to on Page 43)

No 5318.

Dated, 24th May, 1913

With reference to your No 2983, dated the 5th instant, asking for a small Improvement Scheme dealing with a portion of Second Nagpada, I have the honour to forward herewith plans† (Land Manager's Nos 49 and 50, dated 23rd May 1913), estimates, statement of properties to be acquired,† draft notification† and particulars† of the scheme for an area of about 7,210 square yards lying to the north of Grant Road and between Khandia and Undria Streets

2. The area selected is a small portion of Second Nagpada, but it is typical of the remainder. The existing houses are of all shapes and sizes, and it is difficult at this stage to say which of them will stand cutting about and exactly how they can be altered. The main object is to render as many as possible of the rooms in them habitable and at the same time make sure that as the houses left standing come to be rebuilt a regular system of sanitary development will gradually be established.

3. On plan† No 50 (also marked B) those houses which it appears must be at once removed are coloured pink. These houses are in some cases so old or badly constructed as to render alterations impossible. Others are themselves grossly insanitary or render others so.

4. Plan† B also shews the existing arrangement of the ground floors of the houses. Those which are not coloured pink can in all probability be altered, but actual experience may prove that some of the smaller ones may have to be removed, either because they cannot be altered satisfactorily or because for other reasons it may be desirable to demolish them.

5. The yellow lines shew the final arrangement of the area when all the houses have been rebuilt, but some years must elapse before this stage is reached and practice may show that some modification may be necessary. Ultimately there will be a space of twenty feet between the backs of the

*Vide pp 45 & infra

† Not printed

houses Of this space ten feet will be utilized as a service passage in which a sewer will be laid and by this means the present open drains will be done away with.

6. At this stage it is impossible to give even a near estimate of the cost of alterations to buildings, but the outlay on acquisition, which is the main item, can be estimated It so happens that some of the larger buildings will require but little alteration and their value for recoupment purposes can therefore be gauged The estimates are given in statement **A** attached hereto and show that the loss on the scheme will probably not exceed Rs 5,17,400 A sum of Rs 1,14,400 has been allowed to cover cost of works and alterations, as the works are very small the great bulk of this money will be available for alterations.

7. *Statement B* shews the area to be acquired, etc

Statement A referred to in para. 6 of the Deputy Land Manager's report

	Rs
Cost of acquisition including 10 per cent for management and establishment	8,85,600
Cost of works and alterations to buildings	1,14,400
	<hr/>
Total gross outlay ..	10,00,000
<i>Less.—</i>	
<i>Recoupment —</i>	
Buildings retained and land	4,82,600
	<hr/>
Loss excluding interest and sinking fund charges	5,17,400
	<hr/> <hr/>

Statement B referred to in para 7 of the Deputy Land Manager's report

Total area included in the scheme	7,210 sq yds.
<i>Less—</i> Area occupied by Mosque	820 „
Area to be acquired	6,390 „
Area to be utilized in constructing new service passages and to be added to existing roads .. .	1,030 „
Area available for disposal	5,360 „
	<hr/>

Chairman's Minute.

(referred to at top of p. 44).

Dated, 26th May, 1913

* * * * *

2. The area proposed to be dealt with is one of those typical areas which make up the bulk of the most congested quarters of the City, consisting of two long rows of house-sites between two parallel streets with a sweepers' gully, 3' or 4' broad between them

3 Only one of the houses has a broad frontage some of them have frontages only 10' broad The depth is generally from 50' to 55' In this depth are 3, 4 or 5 living rooms besides bath-rooms and privies Of these rooms it is generally only the front ones that are adequately lighted and ventilated In a few cases, where some open space has been left at the rear of the site, the back rooms get sufficient light and air, but vitiated by the proximity of privies along the foul sweepers' gully The intervening rooms are nearly always insanitary as the only light and air they get comes from a foul and narrow side gully (if there is any) with high houses on each side

4 When the Improvements Committee inspected some of these typical areas last year, it was pointed out that a very substantial improvement can be effected without much loss of time and without much interference with the houses and their inhabitants by the simple measure of demolishing the backs of the houses to a sufficient extent to leave a 20' open space instead of a 3' or 4' gully between them It would then generally be feasible to alter the house so that there would be on each floor a large room lighted and ventilated from the front street and a second lighted and ventilated from the rear open space At the same time the privies could be replaced by water closets and connected with a sewer laid in the 20' rear open space.

5 It was generally agreed that while improvements of this kind could not rank with the more thorough improvements effected by the method of wholesale demolition, the method suggested might be worth adopting in areas, in which wholesale demolition was not necessitated by the insanitary condition of the buildings, or by their structural defects, or by the want of roads to admit air into a congested area

6 It was pointed out that under the law, as it now stands, the main object, *i. e.*, the broadening of the 3' gully to 20' could not be secured without the notification of the whole area and the inclusion of every house as a whole in the schedule for acquisition, and that therefore the great advantages of rapid procedure, small outlay, small loss, and little interference with houses, owners and tenants would be wanting

7 It was nevertheless decided that if only for the purpose of demonstration it would be a good thing to apply this method to a small area, as soon as funds became available without waiting for an amendment of the law

8 There were no funds available just then, but so soon as I found on my visit to Madras for the Sanitary Conference last November that there was a likelihood of funds being made available, I instructed the Land Manager to select a small area for improvement under this method, and as the 2nd Nagpada section is the most congested area in the City, the density of its population having advanced from 482 per acre in 1881 through 552 in 1891, 547 in 1901 and 648 in 1906 to 638 in 1911, I directed that the area should be selected in that section and the report now under circulation is the outcome of these orders

9 The Deputy Land Manager's selection seems to me to be satisfactory, the experimental area includes houses of all kinds big and little, tall and low, strong and weak. There are a good many that can be left standing with but little alteration, those that will have to be demolished either on account of their ricketiness or in order to admit light and air to rooms in others are painted red in the plan.

10 The Deputy Land Manager's yellow back lines indicating the ultimate T-shape development merely lay down an ideal to be worked up to in the course of 20 years or so, and it may be found not feasible to work up to it in all cases. Ordinarily the T-shape is necessary only when the depth of a building is too great to allow of all its rooms being ventilated from front or rear. In such cases interior rooms have to be ventilated from side spaces and the T-shape development is found to be the most economical to this end. If we leave the choice to the owners of houses we may find some who will prefer rather to permanently close up interior rooms as insufficiently lighted and ventilated to be strictly fit for human habitation, as we have done in some of our acquired houses on Nowroji Hill, than to undertake the alterations required by the T-shape development, and no doubt many other practical difficulties will be found when negotiations with owners are opened. Into such details, however, it is unnecessary to enter at the present stage, they can be fully considered on receipt of the owners' objections in the interval between notification and declaration.

11. At the present stage we have only to satisfy ourselves that a case has been made out for the notification of the area and the first essential is that there shall have been an official representation made by the Municipal Commissioner in respect of the area to be notified such a representation was made under the Municipal Commissioner's No 39990 of 6th March 1905 in respect of the whole of the 2nd Nagpada section which includes the area now proposed for notification.

12 The second essential is that we should be satisfied with the truth of the representation. There can be no difficulty about this for even if we were not acquainted with the locality the plans sufficiently demonstrate that the buildings are so close to one another and so badly arranged and that consequently the interior rooms are so wanting in light, air and ventilation that the health of the inhabitants of those rooms cannot but be injured thereby. It is also clear that as the law stands we cannot remedy the sanitary defects in the area otherwise than by an improvement scheme for the re-arrangement and reconstruction of the buildings within it.

13 The third essential is that we should have sufficient resources for the execution of the scheme. The Deputy Land Manager's report shows that the scheme is likely to involve a net loss Rs 5,17,400. Out of this we have 4 lakhs in the shape of the special grant just received from Government and the remainder is far more than covered by the improvement in our actual

finances for 1912-13 over what was set out in the sanctioned forecast. There a loss of 5 lakhs on the year's working was provided for, whereas there has actually been a profit of about $4\frac{1}{2}$ lakhs.

14 I hope the Improvements Committee will move the Board to adopt the scheme and notify it under section 27

The Chairman having explained the salient features of the scheme, there was some discussion as to whether the locality selected was the best suited to the experiment.

It was pointed out that the cost of the partial improvement proposed would be very nearly $\frac{2}{3}$ rds the cost of a radical improvement by wholesale demolition, and that perhaps it would be better to select a locality where the difference in the cost of the improvement on the 2 scales would be commensurate with the difference in the result.

The Chairman pointed out that such a locality would be difficult to find, that if retention agreements could be arranged for the cost of this scheme might be much less than shown in the rough estimate and that if the result justified the experiment, a second experimental scheme could be undertaken later on.

RESOLUTION No 120 —The Board have taken into their consideration the representation received from the Municipal Commissioner under his No 39990 of 6th March 1905 in respect of the 2nd Nagpada section of Municipal Ward E of the City of Bombay and are satisfied of the truth thereof, and of the sufficiency of their resources to deal with that part of the represented area shown in Land Manager's plan No 49 of 23rd May 1913 lying between Grant Road, Khandia Street, Khandia Cross Lane and Undria Street

2. They consider that the last named area is an unhealthy area and that an Improvement Scheme ought to be made in respect thereof

3. The Report of the Improvements Committee No 1 of 27th May 1913, recommending the Board to approve the scheme set out in Deputy Land Manager's No 5318 of 24th May 1913 for the improvement of said area is adopted.

4. The scheme should now be notified under section 27 of the City of Bombay Improvement Act as Scheme No 41, Undria Street Improvement Scheme

SCHEME No. 41.

(Undria Street Improvement Scheme).

(referred to on page 5)

Land Manager's progress report up to 15th June 1915

There are in all 48 cases in this Scheme—41 cases consisting of houses belonging to separate owners, and the remaining 7 cases being plots of land with sheds, a police chowky, etc

2. As stated in the 8th para. of the Administration Report for 1913-14 the principle being adopted in carrying out this scheme is to abstain from acquiring houses, which are found to be susceptible of being readily brought into a reasonably sanitary condition, provided that the owners bind themselves to make the necessary structural alterations, and to contribute towards the cost of acquiring and demolishing buildings or parts of buildings, which block out light and air from them. As regards other houses, susceptible of being readily brought into a reasonably sanitary condition, but which the owners are not willing to retain, the Trust acquire and re-model them, and then propose to sell such improved houses after a time, instead of reselling vacant land as building sites, which is what has been usually done under the existing practice of acquiring both houses and land, and completely demolishing the former. The remaining houses, which are not susceptible of improvement, are being demolished.

3. It was found necessary to lay down a 20ft open passage between the properties on Undria Street and those on Khandia Street, and as most of the houses do not exceed 40ft in height, the rear rooms will then obtain $63\frac{1}{2}^{\circ}$ of light. The original idea was that the Trust should retain and lay out 10ft of this open space as a service passage with a sewer therein, whilst the owners on either side should each keep a 5ft strip of their land enclosed, paved and unbuilt upon. This proposal may be modified by the Trust retaining either the whole of the 20ft space, as it is thought that it would then be kept cleaner, or in the alternative the Trust may retain the 10ft central passage and the 5ft strip in the rear of houses abutting on Khandia Street, allowing the owners of houses abutting on Undria Street to retain the 5ft strip in the rear of their houses. They will then be able to compare practical results from the two systems—on the East the 5' strip in the owners' possession, on the West the 5' strip absorbed into the service passage.

4. The owners of these 41 houses are mostly Mahomedans, and nearly half of them live on the top floors of their buildings. Under the scheme, 18 houses were thought to be susceptible of alteration and retention, the remaining 23 houses being marked for demolition, as being either unfit for remodelling owing to age, weakness, or as being obstructive, or required for the service passage and the widening of Grant Road.

5. Lengthy negotiations were carried on with these 18 owners between the dates of notification and the start of acquisition proceedings (*i e*, from 5th June 1913 to 2nd June 1914); but before the Special Collector, only 8 owners expressed their willingness to retain. The remainder asked the Trust to acquire the usual reason being lack of ready money to carry out alterations or to pay off the heavy mortgages. Others were unable to retain, as there were many sharers to the property, or minors.

In some cases, the houses were found on close examination to contain some flaw in their construction which rendered them unsuitable for remodelling

6. Owing to these reasons, owners of only four houses are found willing to retain and carry out their alterations. Three owners have accepted the Trust's terms, and one of them is starting the work of alterations.

7. The Trust have only power to compulsorily acquire these properties, and any case of retention by the owner can only be brought about by agreement. Under these circumstances, the Trust found that the only acceptable basis of compensation in retention cases was that of the *net loss to the owner*, that is total expenditure in alterations, etc, *plus* loss of rent owing to the house being made smaller, and to disturbance while alterations are in progress, *less* betterment to the property in the shape of enhanced rents and better security of investment, due to the better lighting and ventilation of rooms by reason of the alterations made by the owner, and by the improvement of the surrounding properties by the Trust.

It will thus be seen that "betterment" is the only item under which the owners can be made to contribute towards the cost of carrying out the scheme, and this item can only be settled by agreement.

8. The Trust have also laid down an ultimate T-shaped development for this scheme, and those owners who retain, or those who buy houses remodelled by the Trust, are required to also take up so much extra land as is required to complete the plots as laid down for the ultimate development.

9. Only two properties remain to be acquired, including one house which may be retained and excluding the 4 large houses, and 2 plots of building land agreed to be retained by the owners, and the Trust started the demolition and alteration of acquired properties in December last.

Up-to-date the Trust have completed the following works —

(a) Houses have been demolished in 3 of which the sites were required for service passages, and the sites of 3 others are being sold to owners for the extension of and better lighting of their houses, and

(b) 6 houses have been remodelled by the Trust.

10. Besides the above, 2 old and obstructive houses are in course of demolition and 4 houses are being remodelled by the Trust.

It is estimated that 3 of the largest houses will be remodelled by the owners themselves before the end of June.

11. The sewer in the service passage is to be laid in two sections, the northern half has been commenced and will be finished before the monsoon, as also will be the greater portion of the southern half.

12. The war frightened several of the owners, who took the opportunity of selling their property to the Trust, and there is no doubt that more owners would otherwise have retained, and that the scheme would have been nearer completion.

APPENDIX D.

(referred to on page 5)

EXCERPT from the Proceedings of a special Meeting of the Trustees for the Improvement of the City of Bombay, held on the 18th November 1913.

8 Read the following note by Chairman on Slum Improvement.

Slum Improvement

By last mail I received from Mr. Dunn the accompanying newspaper cutting advocating the same slum improvement policy which I have long been advocating here

I circulate the cutting to Trustees for favour of perusal

We have decided to defer further consideration of the question whether Government should be moved to legislate on the lines of Part II of the Housing and Town Planning Act till the report of the "Light and Air Committee" on my lecture is out. There seems little prospect of the Committee reporting in the near future and I doubt whether we ought to wait much longer. The question is too important to be indefinitely postponed.

Morning Post.

13th October, 1913.

"Those who are interested in the question of urban housing may be recommended to an excellent article on the subject in the current number of the *Edinburgh Review*. Its author, "GEORGE FLEET," who is already familiar to our readers as a friendly critic of the Municipal Reform Party, makes a courageous attempt to arrive at first principles, the neglect of which, in municipal politics as elsewhere, is apt to have disastrous consequences. He points out that housing legislation in this country is based upon two distinct methods of treatment. The first embodied in the TORRENS Acts was based on the principle that "the responsibility of maintaining his houses in proper condition falls upon the owner, and that, if he fails in his duty, the law is justified in stepping in and compelling him to perform it." The other method is embodied in the CROSS Acts, which enable local authorities to buy up and reconstruct slum areas. The CROSS Acts became Part I and the TORRENS Acts, Part II, of the Housing Act of 1890, of which Part III further extended the principle of municipal trading by giving to local authorities the power to provide "working class" dwellings wherever they thought fit to do so. Now these two main principles are in a manner antagonistic; the one makes an urban authority a trader, the other makes it a governor. The one

'is for direct action, the other for supervision. Both principles have been applied in practice, and as the Reviewer shows the one has been successful and the other unsatisfactory. Where a municipal authority engages in the business of house-building and owning it neglects the work of supervision and regulation. It creates a few expensive show places, which chiefly serve to throw into dark relief the vast ocean of slum property which surrounds them. The slum-owner is encouraged, by the prospect of being bought out at a big price, to let his property get into a desperately bad condition, and the districts neighbouring the municipal experiment become worse and more crowded as the displacement and rebuilding proceed. As to the financial basis of these schemes, the Reviewer gives good ground for the belief that the municipal authorities usually lose even when their accounts seem to show a profit. The County Council has deliberately laid down a fictitious standard of value, on which the profit and loss account is calculated. Thus, for instance, the Bourne Estate at Clerkenwell cost £201,469 to buy, but the housing accounts were only debited with a capital sum of £44,000. "The result is that the rents now charged are only sufficient to meet about half of the total cost of the site and buildings."

Now, it is clear that if public urban housing is done at a loss, it can never become universal; but must always be an expensive and restricted luxury. Yet "what is wanted," as GEORGE FLEET says, "is private town planning everywhere, instead of public town planning in a few chosen spots; decent housing conditions in all parts rather than slums in most, and municipal paradises in a few places." That seems to us very good sense, and its lesson is clear. The proper business of the urban authority is not house-building, but house-regulation. It is notable that in Birmingham, where Mr JOSEPH CHAMBERLAIN, in his salad days, gave municipal trading an enormous impetus, the opposite principle should now be in favour. Mr J. S. NETTLEFOLD, for many years Chairman of the Birmingham Housing Committee, has described how by careful supervision the whole standard of housing in the City has been gradually improved. The procedure is that when the medical officers report houses as unfit for human habitation notices are served on the owners to make the houses fit, and the owners are invited to interview the authorities before spending money. By careful consultation and supervision and the consideration of each case upon its merits the property is gradually improved at no cost to the ratepayers. Under Part I of the Act the rehousing of Birmingham would have been "a financial impossibility, no matter how generous and enthusiastic the ratepayers might be." But under Part II, "the Housing Committee sees its way by gradual and vigilant work to improve the housing condition of the whole city, instead of being pulled up for want of funds, as it would have been if a policy of wholesale demolition, followed by municipal house-building, had been adopted." Mr. SIDNEY WEBB, Mr. BERNARD SHAW, and other enthusiasts for Municipal Socialism must know in their hearts that their policy has failed. What they have really done, as is very well shown in that cynical and pessimistic play "Widowers' Houses,"

is to enrich the worst type of slum landlord at the cost of the general community. What is their remedy? To expropriate without compensation might be popular with some Socialists, but it would only intensify the evil, as it would kill private enterprise and stop all expenditure even on improvement. Yet there is no other way of financing municipal ownership if it is to be widely extended. In other words, their policy is a blind alley, and ought to be reconsidered.

The true remedy, as the *Edinburgh* writer points out, is for municipal authorities to take up their true duties in earnest and induce or if need be force house-owners to make their property habitable. A house-owner has no right to let an unhealthy house any more than a grocer has the right to sell adulterated sugar or a milkman watered milk. If the house-owner is unable to keep his houses in a proper condition let him be cleared out and his property sold to those who will. Let the municipal authorities prosecute their business of regulation and supervision. Here they will find abundant and more profitable scope for their activities. The results may not be so showy as a model municipal property, but they will be of infinitely greater value to the community and also of infinitely less cost to the ratepayers. And one of the tasks which these authorities have to perform is *drastically to recast their bye-laws on lines of experience and commonsense. The bye-laws at present in vogue are so inelastic and cumbersome that they actually prevent the erection of cheap property on pleasant and healthy lines.* This is proved by the fact that the promoters of the Garden Suburb movement had to get a special dispensation from these bye-laws before they could build their model suburb. *In particular, the cast-iron regulation as to the width of roads has done more harm than good.* Much of the land used in this way would be much better as gardens. Used as unnecessary road it adds greatly to the expense of both building and upkeep, and increases the dust nuisance. A suburb should be viewed as a whole by the authority responsible for it. Its main arteries should be as wide as is necessary to main road traffic, and its domestic roads should be suitable to domestic traffic. The separate builders should be brought together and their plans of development harmonised. The whole plan of the locality should be worked out with a proper regard to its natural features and possibilities, and without too much red-tape regulation. The Hampstead Garden Suburb is in some respects a most encouraging example of what may be done by looking at the problem with the eye of enlightened commonsense. That this experiment may be improved upon goes without saying. But the improvement, when it comes, will, we are confident, be upon the lines indicated in this article. That is to say, the work of building will be in the hands of the private owner, and the work of general supervision, regulation, and control in the hands of the local authority. We suggest to Unionists and Municipal Reformers who have interested themselves in this matter that they should consider the principles laid down in this article with a view to their embodiment and elaboration either in bye-laws or in an Act of Parliament."

The Chairman stated that he did not wish the Board to do more than record these papers, if they still thought they ought to continue waiting for the Light and Air Committee or the Municipality to take action before taking any further action themselves

He illustrated the increase in cost of acquisition of slum areas which results from delay in acquisition and toleration of bye-laws which permit of extension upwards and outwards of buildings in such areas by quoting figures for the Undria Street Improvement Scheme area which showed that since 1901 —

- (a) Out of 41 houses in this scheme 14 had a loft removed and one extra storey added and the average assessment per house had gone up from Rs 441 to Rs 867.
- (b) One house had 2 extra storeys added and the assessment had gone up from Rs 338 to Rs 1,437
- (c) 19 houses had minor sanitary improvements made in them, and the average assessment per house had gone up from Rs 545 to Rs 998
- (d) Seven houses had been pulled down and new houses erected and the average assessment per house had increased from Rs 537 to Rs 2,388
- (e) The total assessment had therefore more than doubled in the interval between 1901 and 1913,

RESOLUTION No 236 —Recorded

APPENDIX E

(referred to on page 6)

EXCERPT from the Proceedings of a Meeting of the Trustees for the Improvement of the City of Bombay, held on the 4th August 1914

8. Considered, with reference to Trustees' Resolution No 135, dated 16th June 1914, the following note by Mr. Orr, C S I, I C S (Circular No. 372 of 1914).—

1. By Trust Resolution No 135 of the 16th ultimo, the Board adopted a motion brought forward by the Hon'ble Sir Ibrahim Rahimtoola that "the Chairman be requested to submit a report embodying the original rough estimates for all represented areas." The original estimates and the correspondence thereon are contained in a number of rather massive files which any Trustee can call for if he pleases. But probably an analysis of the chief points in these estimates will suffice for the Board's purpose. I accordingly submit herewith tabular statements giving the area, the gross cost and the nett loss on each of the rough schemes framed for the several areas hitherto represented except Tulsirampada and Worli for which we have as yet no estimates. I would draw attention to the fact that the average gross cost per acre is $2\frac{1}{2}$ lakhs and the average nett loss $1\frac{1}{2}$ lakhs. In round figures, therefore, we may put the average nett loss at Rs 25 per square yard.

2. In the second statement I have given similar information as regards four of the Trust's Schemes which include certain represented areas. Here the average gross cost per acre works out to a little over two lakhs and the nett loss to a little under 1 lakh, which is roughly equivalent to about Rs 19 per square yard.

3. The estimates in the first list were all drawn up many years ago and judging from experience in Kamatipura and in the Undria Street Scheme which forms part of Second Nagpada it is probable that new detailed estimates would give far heavier nett loss than Rs 25 per square yard. For, in Kamatipura it was found in 1912 that assessments had increased by no less than 76 per cent since 1905 when the original estimate was framed, while in preparing the Undria Street Scheme it was found that since 1901 more than half the houses had been enlarged or rebuilt and that the total assessment had more than doubled in the interval between 1901 and 1913.

4. It will no doubt be pointed out that the average taken from the second list, i.e., the list of actual schemes for which the estimates are of

comparatively recent dates, the average loss was only Rs 19 per square yard. But I must point out that in these cases more than half the total area is taken up by the revised East Agripada Scheme in which the nett loss is less than $\frac{1}{8}$ lakh per acre. This is due to the fact that the bulk of the property to be acquired in this scheme is open land whereas most of the areas in the first list are areas densely crowded with houses on which the loss must be much more heavy, because the Trust have to acquire the houses on the basis of their present rentals and then have to demolish them and throw much of the area they covered into roads from which they get no financial return.

5 Probably if we take up all the represented areas on the old wholesale demolition lines the nett loss will be not less than 4 crores or about four times the extra resources we have asked Government to let us have, and even then we shall have dealt with only 269 acres whereas the whole area that ought to be represented covers not less than 1,200 acres.

6 It is obvious that we must adopt less expensive methods of dealing with the slums and I can only again recommend the Board to press for early legislation on the lines of Part II of the Housing of the Working Classes Act as recommended in Improvements Committee's Report* No II, dated 6th November 1912, copy of which is attached to this note, also by Mr. Harvey in 1901.

7 The Trustees will remember that when they considered the Improvements Committee's Report just referred to they decided to await the result of the enquiry that was to be made by the Government Committee appointed to examine the questions raised in my lecture on "Light and Air in Dwellings in Bombay" before they proceeded to consider and come to a definite decision as to how the several represented areas should be dealt with. I believe the Government Committee have done nothing for nearly a year, and I would suggest that if the Government Committee show no signs of doing anything in the near future the Trust should no longer await their report but should forthwith take up consideration of the Improvements Committee's recommendations.

8 I would draw the attention of the Trustees to my note† printed in the preamble to Trustees' Resolution No 236 of 18th November 1913, hereto attached. In that note I sounded the Board as to whether they should continue to wait for the Government Committee's report or for the amendment of the Municipal Bye-laws and I did not then press them to cease waiting, but as, in the meanwhile, there has been no sign of action on the part of the Government Committee while the Municipal Committee have decided to move for certain very important amendments of the Law and Bye-laws, I would now press the Board to cease waiting and take independent action.

* *Vide pp 7-9.*

† *Vide pp 51 54*

Statement of areas represented by the Municipal Commissioner referred to in para 1 above

Represented areas	Municipal Commissioner's No and date	Area in acres	Estimated gross cost in lakhs.	Nett loss in lakhs.	Engineer's estimate No and date	REMARKS.
1 Fort North	<u>18945</u> 2-10-03	45 5	<u>233 5</u> 233 5	<u>139 8</u> 139 8	<u>3936</u> 18-6-06	
2 Kolbhatwadi	<u>39986</u> 6-3-05	2	<u>16 9</u> 14 9	<u>4 5</u> 5 6	<u>4083</u> 21-6-06	
3 Umerkhadi	<u>39987</u> 6-3-05	9	<u>26 1</u> 39 2	<u>14 1</u> 18 8	<u>2041</u> 27-3-06	
4 East Agripada, Guzri Bazaar, Madanpura, Kalapani, Tank Pakhady	<u>39988</u> 6-3-05 <u>39992</u> 6-3-05 <u>39993</u> 6-3-05 <u>40059</u> 6-3-05	103 6	<u>81 8</u> 97	<u>41 7</u> 57	<u>4082</u> 21-6-06	Figures in ordinary type represent the rough estimates framed by the Engineer on receipt of Municipal representation
5 Telwadi ..	<u>39989</u> 6-3-05	3 4	<u>19 8</u> 19 8	<u>14 5</u> 14 5	<u>3984</u> 16-6-06	Figures in black type denote the revised estimates adopted by Mr. Dunn for his forecast of 1909
6 2nd Nagpada	<u>39990</u> 6-3-05	27 3	<u>77 5</u> 70 9	<u>41 8</u> 39 8	<u>2129</u> 30-3-06	A part of this is being dealt with in Scheme 41
7 Middle Colaba	<u>39991</u> 6-3-05	7 4	<u>20 6</u> 19 6	<u>16</u> 16 1	<u>2541</u> 18-4-06	
8 Kamatipura	<u>39994</u> 6-3-05	58 04	<u>83 2</u> 80 5	<u>39 3</u> 38 6	<u>2273</u> 5-4-06	
9 Ghorupdeo .	<u>1278</u> 15-4-08	12 4	<u>15 8</u>	<u>6 1</u>	<u>1943</u> 12-3-09	
10 Tulsirampada	<u>22017</u> 24-10-13					
11 Worli	<u>37892</u> 26-3-14					
Total		268 6	575 2	317 8		Rs 25 per sq. yd.
Average per acre		..	2 1/4	1 1/4		

Statement of sanctioned schemes covering the whole or portions of represented areas referred to in para 2 above —

Represented areas	Municipal Commissioner's No and date	Area in acres	Estimated gross cost in lakhs	Nett loss in lakhs	Engineer's estimate No and date	REMARKS
1 Scheme 29, Nowroji Hill	<u>40060</u> 6-3-05	31 6	<u>64 3</u>	<u>21</u>	<u>7382</u> 18-12-05	
2 Scheme 32, East Agripada	<u>39993</u> 6-3-05 <u>40059</u> 6-3-05	57	<u>48 5</u>	<u>27 5</u>	<u>1840</u> 3 4 11 L M s 3077 28 4-11	(a) Covers Kalapani and a portion of Tank Pakhady
3 Scheme 37, Sydenham Road Scheme	<u>18852</u> 15-9-05	12 7	<u>83 6</u>	<u>41 7</u>	<u>3842</u> 12-6-09	(b) Covers a portion of Memonwada.
4 Scheme 41, Undria Street Scheme	<u>39990</u> 6-3-05	1 3	<u>10</u>	<u>5 2</u>	<u>5318</u> 24 5 13	(c) Covers a portion of 2nd Nagpada
Total		102 6	206 4	95 4		

RESOLUTION No. 170 —Recorded.

APPENDIX F.

(referred to on page 6)

EXCERPT from the Proceedings of a Meeting of the Trustees for the Improvement of the City of Bombay, held on the 11th August 1914.

6 Considered, with reference to Trustees' Resolution No 147, dated 30th June 1914, the following minutes by the Chairman (Mr Orr) on such recommendations of the Development Committee as concern the Trust —

Minute, dated 10th June 1914, by the chairman (Mr. Orr).

1. Letter No 4479 of 5th June 1914 from the Secretary to Government, General Department, is circulated to Trustees herewith and a copy of the Bombay Development Committee's Report will be sent to each Trustee.

2 Government have not yet passed any orders or even expressed their opinion on the Committee's recommendations, but they want to know what action the Bombay City Improvement Trust propose to take in order to give effect to those recommendations with which they are concerned.

3 I have numbered the 6 points with which we are concerned in red pencil in the margin of the Government letter and give my opinion for what it is worth on each below —

4 *Point 1* —“ An improvement scheme for Fort North including a communication from east to west is desirable and important ”

I concur, and I would recommend the Trust to prepare the scheme along with similar schemes for many other congested areas as soon as the law and Municipal bye-laws are amended on the lines indicated in para 22 of my memo * printed at pages 360-3 of the Bombay Development Committee's Report, in paras. 4[†] to 6 of the Improvements Committee's Report No II of 1912 printed at pages 122-3 of our annual Report for 1912-13 and in the[‡] second and third para. of my third answer on page 286 of the Development Committee's Report.

5 *Point 2* —“ Migration from the slums should be encouraged by developing open land for residential purposes.”

I concur The Trust can carry on development of their estates as hitherto and encourage development of private estates by providing Bombay with the Eastern Avenue as the one means of traversing the Island rapidly by car from end to end.

6. *Point 3* —“ The Improvement Trust should continue to devote special attention to the provision of sanitary chawl accommodation for the poor evicted from tenements demolished in process of improvement schemes ”

* *Vide* pp 64-70

† *Vide* pp 7 & 8

‡ *Vide* pp 70 & 71

I concur. This again is a case of merely sticking to our programme of sanctioned schemes

7 *Point 4* —“ The question whether the Improvement Trust should not undertake small improvement schemes for the betterment of congested areas should be considered ”

I concur It is a question of ways and means and my recommendation on point 1 applies here also

8. *Point 5* —“ Every scheme of development should make provision for the reservation of land to remain permanently open for recreative purposes ”

In my opinion this is stated too broadly. Much depends on the size and situation of the scheme and the demand for land for purposes other than recreation, as indicated by the value of the land I adhere to the views stated in my statement at page 39 of the Report and in the note on pages 39 and 40 The Trust should not, I think, commit themselves to anything more than an undertaking to consider the Development Committee's recommendations whenever a development scheme is before them It will in my opinion be quite unnecessary and impracticable to provide recreation grounds in small schemes of the type of the Undria Street Scheme

9 *Point 6* —“ There should be periodical conferences of deputies from various public bodies to secure co-ordination in development of Bombay ”

I concur and would recommend the Trust to depute the Chairman to such conferences.

Minute, dated 16th July 1914, by the Chairman (Mr. Orr)

1. On receipt of the Bombay Development Committee's Report I wrote a note embodying my opinion as to how far the Board should take action in respect of each of the six recommendations made by the Committee on matters in which the Trust are concerned

2 Among the minutes written by Trustees on my note when it was under circulation was one by Sir Ibrahim in which he stated that the Development Committee had recommended the *immediate* undertaking of improvement schemes, whereas I wanted the law to be amended before any more improvement schemes were undertaken

3 On my asking Sir Ibrahim to point out this recommendation in the Committee's Report, he wrote “The Committee do not recommend any alteration or amendment of the existing law but they do recommend that improvement schemes must be undertaken It is therefore obvious that in the opinion of the Committee improvement schemes should be *forthwith* undertaken.”

4. When the matter came before the Board on the 30th ultimo, I pointed out that the Committee's Report contained no explicit recommendation that "improvement schemes must be undertaken." It seemed to me that as the Committee knew that the question of ways and means was a very difficult one, the Report (Chapter VI, para 23) had been of set purpose cautiously worded so as not to make any such specific recommendation. The wording is "it should be considered whether side by side with the gradual completion of the extension schemes at present in hand the Improvement Trust should not also devote itself to undertaking small improvement schemes within the City. In addition to the alteration of the bye-laws with a view to emphasise the individual responsibility of house-owners for the habitable condition of their dwellings there should in our opinion proceed general schemes for betterment of congested areas through the agency of the City Improvement Trust "

5. After some discussion the Board at Sir Ibrahim's instance asked me to submit a report embodying my views on such recommendations of the Development Committee as concern the Improvement Trust, and I understand that what is wanted is some amplification of my original note and in particular an exposition of my reasons for recommending that no more improvement schemes should be undertaken until the law and bye-laws have been amended and a statement of the amendment I would wait for

6. I may state to begin with that I had not had time when I wrote my first note to study the Committee's Report thoroughly. Having now studied it I am able to draw attention to the penultimate sub-para of para. 35 which confirms my view that the Development Committee's Report does not contemplate the *immediate* undertaking of improvement schemes. The Committee (Sir Ibrahim alone dissenting) put the improvement of Fort North in the forefront of their programme, but so far from saying that it must be taken up at once without waiting for the amendment of the law and bye-laws they say "Its advent will be facilitated and accelerated by the revision and bringing up-to-date of the building bye-laws and (if necessary and demanded) by legislation to enable the Municipality to deal effectively with the owners of insanitary dwellings "

7. It seems very necessary to show that the Development Committee's Report does not contemplate the immediate undertaking of improvement schemes regardless of cost and without waiting for amendment of the law and bye-laws, because there seems to be an impression in various quarters that one effect of the issue of the Committee's Report must be to put a stop to expenditure on the Eastern Avenue and divert the 90 odd lakhs now available for the completion of the Eastern Avenue Scheme to a scheme for the improvement of Fort North or some other slum area. Such diversion would in my opinion be the greatest mistake the Trust could make, and I do urge them most strongly to stick to their original programme as outlined by Government in 1909 and devote the funds they have at command now to the

completion of the Eastern Avenue. It will be seen from para. 7 of the Development Committee's Report that they approve that original programme.

8. The detailed schemes which the Trust are now considering for the broadening of the central and northern sections of Parel Road to 120' show that the Eastern Avenue can be completed with the Trust's present resources. It is naturally represented that there will then be nothing left for improvement of the slums ; but Government are committed to supplying us with fresh resources for the completion of our programme and by the time the necessary amendments of the law and bye-laws have been actually carried out, we ought to be in possession of 4½ lakhs per annum to be entirely devoted to slum improvement. Sir Ibrahim tells me he fears that once the Eastern Avenue Scheme is provided for, Government will not bother about getting us more funds ; and he wants to get what money we have devoted entirely to slums so that the necessity of completing the Eastern Avenue may make Government more keen about enhancing our resources , but I see no reason whatever for those fears. Government have more than once clearly indicated that they are anxious to see our slum improvement programme extended ; they recently sanctioned our one new improvement scheme—The Undria Street Scheme—and I am confident that if the method of house improvement that that scheme aims at demonstrating proves a success, Government will give us the strongest support in getting it extended to many other areas after amending the law so as to reduce the cost to the public purse and enable a far larger area than now to be improved for a given sum.

9. We have learnt by sad experience that the longer a scheme for broadening a street is postponed the more its ultimate cost will be, mainly by reason of new houses being hereafter erected along the route, so that where the Trust would now have to pay only the value of open land they will hereafter have to pay for land and building. There is nothing to be gained by deferring the widening of our one main north and south road, whereas if we defer acquiring slum properties until they have been depreciated we may effect great savings for the public purse.

10. From my point of view then the position is this—we have got the money necessary for completion of the Eastern Avenue Scheme ; the longer we defer that scheme the more it will cost us. We can't profitably devote this money to improvement schemes, because we aren't ready to take them up until the law and bye-laws are amended which will take quite as long as legislation for supplying the Trust with enhanced resources. These resources will be available for slum improvement and will go further if meanwhile the construction of the Eastern Avenue has resulted in the dispersal of population from the slums to sanitarily developed estates within easy reach of the Eastern Avenue throughout the length of the Island. It would therefore be unwise to divert our funds from the Eastern Avenue to any improvement scheme and wasteful to devote it to the immediate improvement of Fort North or any other large congested area under the existing law, with the result that

all our funds would be spent on the improvement of a very small proportion of the whole slum area to the benefit of few except slum owners, leaving large areas equally deserving of immediate attention wholly unprovided for

11 I am well aware that there is a popular outcry against the Trust on the ground that they have spent too much money on roads and not enough on improvement of slums but the bulk of the people who repeat this cry have no idea of the value of street schemes as an indirect method of improving the slums in general over and above their direct effect in sweeping away the slums through which they pass. People don't realize that the new streets provide improved frontages and give easy access to back-lying estates which thus become capable of being sanitarily developed and so of providing decent dwellings and attracting people out of the slums so that ultimately slum rents and therefore the cost of acquiring slums will be reduced.

12 Again the man in the street clamouring for the Trust to take up slum improvement has no idea of the fact that under present conditions the whole of the Trust's resources would be expended on at most one-thirtieth of the area that needs to be dealt with—an area which must go on increasing the longer the enforcement of bye-laws ensuring adequate control of estate development is deferred. I quite approve of the policy of so spending our money that all parts of the City may benefit by such expenditure, but under the present law and bye-laws this policy resolves itself into abstaining from direct expenditure on slums, because we haven't enough money and never shall have enough to do any appreciable good with, if we spread our operations over all parts of the slum area. Until we can depreciate slum property or reduce the cost of our methods of dealing with them we are driven back upon the policy of touching no part of the slums because we can't deal with all parts. Why should the Fort North or any other large part of the slum area be favoured, if the rest is to be left untouched? Far better rely on indirect methods like street schemes and expansion schemes and enforcement of adequate bye-laws until the whole can be dealt with on some uniform system.

13. I would always be ready to undertake an improvement scheme in a particular area in advance of the general scheme for all the slums, if it happened to be in the line of a street scheme intended as an indirect scheme for the improvement of the slums in general. and I see that the Development Committee give the necessity of an east and west road through Fort North as one of their reasons for specially recommending Fort North for improvement: but I am unable to admit that the contemplated road would benefit the slums in general. It is not like the Eastern Avenue a main trunk road affording easy access to new estates under sanitary development. Moreover any improvement scheme in Fort North would involve a large displacement of population, far more serious than the displacement along Princess Street and Sandhurst Road. There for the most part the demolished houses were comparatively low and probably as many people are sanitarily housed on the new frontages as were insanitarily housed in the old houses. but the houses

in the Fort are very high and at present very crowded and no road scheme could be devised which would not result in a large nett displacement of population. As I stated in my original note I quite agree with the Committee that the improvement of Fort North is very desirable and I would take it up along with other areas as soon as the necessary amendments of law and bye-laws have been effected. but both on account of the reasons stated above and of those set out in Sir Ibrahim's minute of dissent, I would let it wait along with the numerous other areas which are even more densely populated. I do not think sufficiently good reasons have been made out for taking it up before them. From my recent lecture on "Density of population in Bombay City" which I hope the Trust will have printed at an early date, it will be seen that Fort North ranks only 15th in the order of density of population.

14 I have already indicated in my original note the nature of the amendments I recommend in the law and bye-laws so I need not do more than refer to that note (point 1) here. A Committee of the Corporation have already agreed to most of the necessary amendments and I hope that the acting Chairman will attach to this note the printed draft report of the Committee which I left with him for the Trustees' information. The amendments to which that Committee have not referred are those which, following the recommendations which Mr. Harvey made some 12 years ago, I have proposed in the way of adaptations from the Housing of the Working Classes Act giving the local authority power to acquire parts of buildings and power to remove obstructive buildings or parts of buildings in order to form air spaces and to levy betterment from the owners of houses benefited by the creation of such air spaces.

15 The cost of many of our schemes would have been greatly reduced if we could have levied betterment from the owners of properties just outside our schemes which benefit by the open spaces we have left in the rear of our plots. It is quite true that because poor people don't yet fully appreciate the benefits of light and air in their rooms, they don't pay higher rent when the lighting and ventilation are improved and this gives the landlord some justification for disclaiming betterment but the real betterment comes in the greater security of his rent, for there is no doubt that as education progresses and the standard of comfort rises even poor people will vacate dark rooms when good rooms are available at equal rents in the neighbourhood. Moreover, when individual rooms can be closed as U. H. H., if they are inadequately lighted and ventilated as the Municipal Committee propose, there will be undoubted betterment when the creation of a new air space saves a room from such closure.

16. On re-reading this note I apprehend that some readers may ask what I mean by depreciation of slums and what I think will lead to such depreciation. I was glad to hear the other day from a friend who does much work in advising on proposed mortgages of slum properties that already the rumours as to what was being proposed in the Trust and the Municipality

had affected values in the slum area. The sooner the period of doubt is ended, the better, and I hope it will not be long before all the amendments of law and bye-laws that I have recommended are finally adopted. There will then be no more doubt about values, and I anticipate that slum properties will fall in value (and it is quite right that they should after the long period in which the owners have enjoyed exceptional rents) when it is known that U. H. H. rooms will be closed, that no extension upwards or outwards of a house which does not satisfy modern sanitary standards will be permitted, that if a house is burnt down, at least one-third of the site will have to be left free of building, that more and more rooms satisfying modern sanitary standards are being constructed to compete with insanitary rooms and that more and more areas are being developed on sanitary lines by reason of improvement in communications, means of transport, then there will be no more of that disastrous under-selling of sanitary properties by insanitary properties, but the former will be encouraged and appreciated while the latter are discouraged and depreciated and then and not till then we shall be able to profitably undertake the wholesale improvement of the Bombay slums.

On the Chairman moving that the subject be referred to the Improvements Committee, Sir Sassoon David moved the following amendment —

“The letter from Government and Mr Orr’s minutes thereon should be considered at a special Meeting of the whole Board”

The amendment being put to the vote was *carried*. It was also carried as a substantive proposition.

It was accordingly resolved—

RESOLUTION NO. 182.—The letter from Government and Mr. Orr’s minutes thereon should be considered at a special meeting of the whole Board.

Note on the question how far compensation should be paid out of the public purse to owners of houses (1) in which rooms hitherto used for human habitation are declared unfit for human habitation or (2) in which the Municipality require the owners when making substantial alterations to satisfy higher standards of sanitation than the minima which were prescribed by the Municipality when the houses were first built.

(referred to on page 58)

1 The Municipal Act and bye-laws do not lay down that a builder shall (*e.g.*) leave so much open space round his buildings *and no more*. They leave him free to do what he likes, provided that certain *minimum* requirements which they prescribe in the interests of the public health are satisfied.

2. Where land is costly and the demand for accommodation is heavy, builders in Bombay have hitherto nearly always reckoned on being able

to let their rooms, even if they provide only the minimum external open space and in other respects also only just satisfy the minimum requirements of the law, and they therefore build over the maximum they can build over without breach of the Municipal Act or bye-laws

3 If in course of time this reckoning proves mistaken because the standard of comfort rises more sanitary houses are built and those best lighted and ventilated are preferred to the older insanitary buildings, the owners of the latter will suffer some loss but they cannot expect the public purse to compensate them for this loss, for it would never have occurred had they not preferred immediate high profits to smaller profits secured for a longer period. The necessities of the moment created an exceptional demand for accommodation. A prudent builder should have foreseen that if this demand were met not by bringing new areas under building and providing ample open spaces but by extending existing houses upwards and outwards so as to increase the density of population and aggravate the overcrowding of houses upon land, this must before long result in such insanitary congestion that the congested localities would cease to be in demand for residences and would be deserted in favour of more healthy localities in which the dwellings satisfied a higher standard of sanitation. The prudent builder would, therefore at the very outset, have built to a higher standard of sanitation. He would (*e.g.*), have provided his rooms with more light and air and would therefore have had to do with fewer rooms, each of these might perhaps bring a higher rent than a less sanitary room, but because the public of the middle and lower classes are not yet educated upto a standard of comfort which requires an ample supply of light and air to living rooms even if higher rent has to be paid in order to get this supply, the total rent would no doubt be for a time less than that realised from the same outlay on insanitary buildings. This initial disadvantage would however in time be compensated by the *greater security* of the rent. There would be no fear of loss of tenants by reason of a general rise in the standard of comfort. Indeed when such a rise would be causing an exodus from insanitary properties, there would be increased demand for sanitary housing and the prudent builder might be able to get higher rents. It would be unfair at this stage to put the imprudent builder upon an equality with the prudent builder by compensating the former from the public purse for the loss of rent due to his own improvidence. Such a step would encourage insanitary development and discourage sanitary development of building estates.

4 I think there can be no serious opposition to the view that in the cases I have so far dealt with, cases in which loss of rent accrues to owners of insanitary dwellings by the free operation of the ordinary laws of supply and demand consequent on the competition of new sanitary dwellings with old dwellings satisfying a far lower standard of sanitation, the owners of the older buildings cannot claim compensation from the Municipality on the ground that the Municipality did not originally prevent them from building to the lower sanitary standards.

5. There is however a difference between such cases of *free* supply and demand and cases in which the law interferes with the ordinary demand by prohibiting occupation for human habitation of dwellings that fall short of a higher standard of sanitation than was hitherto enforced, at a time when popular demand, if left to itself, would be content* with a lower standard. Here it seems to me there can still be no call for compensation, provided that in prescribing the higher standard the law is acting in reasonable exercise of its rights and duties as guardian of public interests.

6. If a builder builds over every inch of his plot and gets light and air for his rooms from over the adjacent plots; and if subsequently the owners of these adjacent plots hoard him in, many of his rooms will be deprived of light and air and he will lose in rent, but he cannot reasonably expect to be compensated by those owners, much less by the public purse, on the ground that he has built in accordance with the law.

7. The argument against the grant of compensation here is that the neighbours have merely acted on their rights in hoarding the builder in and that the builder has only himself to blame if he didn't foresee this and didn't provide sufficient light and air for his house within the limits of his own possession.

8. Similarly when Government alter the law or the Municipality alter the bye-laws in reasonable exercise of their rights as guardians of the public health, house-owners who suffer thereby because they did not foresee and allow for such alterations when they built their houses are not in my opinion entitled to compensation. The only question to my mind is how far the alterations are reasonable. It *may* be unreasonable to make too sudden or too severe an alteration without providing for compensation proportionate to the loss involved in particular cases, and that is why when suggesting the standardisation of lighting and ventilation in Bombay in my 1912 lecture on "Light and Air in dwellings in Bombay," I left the question of compensation open and mentioned (*vide* Lecture § 5 *ad fin*) only one clear no-compensation case, *viz*, the case of a builder, who deliberately constructs uninhabitable rooms with a view to getting compensation for them when they are closed.

9. I have always thought that owners of rooms satisfying a standard of lighting and ventilation which comes anywhere near half the 63½° standard should be assisted by the Municipality towards making the alterations required to reach the 63½° standard, and that is why I have proposed that the Municipality should, on the reconstruction of 2 old buildings on either side of a common boundary, insist on each owner leaving an open space adjacent to the

* It cannot justly be said that the present population is content with the dens I want closed, they inhabit them because they can't get anything better, and better rooms are not provided fast enough, because would be sanitary builders are put off by fear of the ruinous competition of these bad rooms and also by want of good approach roads to new areas. Prohibit occupation of such rooms, and the enforced demand for better rooms will soon produce the supply, and though the occupants will have to pay higher rent they will prefer that to their old bad way of living in insanitary surroundings moreover, the rise in rent will be eased off by the provision of semi-permanent camps at low rents as suggested in my lecture as a *sine qua non* before rooms are closed.

boundary for the benefit of both himself and the other and why I have proposed the new class of improvement schemes for the broadening of open spaces at the rear of rows of back to back houses.

10 On the other hand I have always maintained and still maintain that all the worst lighted and worst ventilated rooms in the City, which no Health Officer could pass as fit for human habitation, should be closed as soon as possible without compensation. The owners have already made far greater profits from renting their rooms than they could have expected had they had any consideration for the health of their tenants, and out of these abnormal profits they ought to have put by a sinking fund to meet the cost of the alterations now required to make their rooms rentable under the new and reasonable standard criteria of habitability. They would have been closed long ago without compensation but for the flaw in section 378 of the Municipal Act, which makes it impossible for the Health Officer to condemn any room as unfit for human habitation unless he can condemn the whole house.

11. This very section 378 supplies one of many instances in which alterations of the law which involve depreciation of property are not accompanied by provision for compensating the owners of that property. There is no guarantee given to builders that when the general law or the Municipal Act or bye-laws are altered builders will be compensated for any loss* caused to them thereby.

12 When the Municipal Act was amended in 1905, many house sites must have been depreciated by the new provisions limiting height of buildings thereon, but no compensation was given to the owners of those sites. Similarly the 1910 bye-laws depreciated sites for the time being by requiring certain open spaces, and they apply to some extent to old building sites, but no compensation is given for the depreciation.

13. It has now become a public scandal that many rooms utterly unfit for human habitation are rented to poor people, who have nowhere else to go to, and it is proposed to prohibit such habitation and find sanitary accommodation for these people in temporary sheds or elsewhere (*v* § 18 *infra*). There is no reason whatever in these worst cases why the owners should be compensated from the public purse, in my opinion it would be utterly unjustifiable to give them any compensation at all.

14 Some of these rooms were perhaps fit for human habitation when first constructed but have now become unfit through being deprived of light and air by construction of new buildings near them. *Moral*—Have necessary light and air provided† *in the owner's own land*

* There will be some cases in which the creation of a 20' space behind houses by cutting down rear ends will *enhance* the value of a property, if in valuing it before alteration the fact that certain of its rooms are unfit for human habitation or are so nearly unfit that with a rise in the general standard of comfort they will, in a few years not find tenants, be taken into consideration.

† Even this won't meet the case in which an owner originally provides an open space but afterwards builds on it. As in England the minimum open space must always remain attached to the buildings and must never be built over

15 We want to depreciate insanitary buildings and appreciate sanitary buildings, otherwise slum owners are encouraged to keep insanitary buildings unaltered and even extend[†] them and make them more insanitary than ever in hopes of forcing[‡] the Trust to acquire them. If there is no chance of their being able to force the Trust's hand, they will have to alter and improve the buildings to attract tenants, otherwise they will lose rent as new sanitary buildings are erected and the standard of comfort rises, and the fear of this loss should be used as a lever towards getting builders to conform to higher standards of sanitation than the minimum for the time being prescribed by law. This is done through architects in England, an architect won't risk his good name by designing to only the *minimum* requirements of the law.

16 It is now notorious that even the new Bombay Municipal bye-laws permit of construction of rooms that are insufficiently lighted and ventilated. If we give out that, once constructed, they will not be required to be altered without payment of compensation, builders will hurry to complete bad buildings before we can alter the bye-laws, especially if the houses are in represented areas which they expect the Trust to deal with soon.

17. In my opinion, then, the hardships which come upon the *owners* of inhabited rooms, when those rooms are closed as being unfit for human habitation, may be regarded as hardships which the owners have brought upon themselves and which they may reasonably be expected to meet by setting their houses in order at their own expense without assistance from the public purse. But the case of the *tenants* of these rooms is different. If large numbers of them were to be deprived of their dwellings all at once, the result might be the creation of fresh insanitary conditions by the overcrowding of other dwellings and an abnormal rise in rents involving fresh hardships for the poor.

18 It is therefore necessary that no room should be closed as unfit for human habitation, until it has been ascertained that the tenants can find decent accommodation in the neighbourhood without increase of rents, and, if such accommodation cannot* be found, then it should be provided in the shape of semi-permanent huts at the expense of the public purse.

19 I suggest semi-permanent huts because the ultimate permanent provision for the accommodation of these people can best be left to private enterprise in the erection of sanitary dwellings, and the semi-permanent huts I intend only as a temporary measure for the necessary interval between the

† In the new Undria Street Scheme area no less than half of the houses have been extended by addition of extra storey or otherwise since the area was first "represented". Every such addition makes the want of light and air in rooms abutting on the narrow gullies between these houses more pronounced than ever and at the same time adds to the cost of acquiring these houses with a view to demolishing them and so improving the insanitary area.

‡ Compare wording of C B I Act Sec 23

* The great strides made in building in recent years appear to have now overtaken the set back due to demolitions in earlier years. There are now many fairly sanitary rooms vacant in houses acquired by the Trust and accommodation could be found in them for 1,000 families before it would be necessary to erect more semi permanent huts.

closure of insanitary rooms and the erection of permanent sanitary buildings, having rooms which the tenants of semi-permanent sheds can afford to rent, I anticipate that in the next 15 years the wages of the lowest classes will rise sufficiently to enable them to pay Rs 3-8 or Rs 4 as rent instead of the Rs 2-8 of the semi-permanent sheds

20 In localities in which there are so many rooms unfit for human habitation by reason mainly of inadequate lighting and ventilation that their *closure involves displacement of a very large number of people*, and where also the poverty of the owners of the houses or other difficulties stand in the way of such improvement of the condemned houses as will permit of the early reinstatement of many of the original tenants or the accommodation of new tenants, it may be desirable in the public interests to induce the owners to improve their houses by giving them some assistance at the expense of the public purse. I think such assistance can appropriately be given by the acquisition of land to be reserved after demolition of buildings thereon as an open space admitting of access of light and air to the condemned buildings. This open space having been provided at public expense, the owners of the buildings should be required to make further alterations in their buildings so as to bring all their rooms not merely up to the standard of being just fit for human habitation but up to a higher standard prescribed by new bye-laws including, as regards lighting and ventilation, the standard of the 63½° rule

21 In cases in which such assistance from the public purse is not given, it would be unnecessary to insist on the immediate* adoption of these higher standards, but the owners will probably find it to their own interest to adopt them for fear of losing tenants when rooms satisfying the higher standards increase in number.

22 To minimise the cost of acquisition of the land to be used for open spaces (v § 20) it is necessary—

- (1) to obtain for the local authority power to acquire **parts** of buildings,
- (2) to take into consideration in estimating compensation for such acquisition the primary value of the building just before such acquisition and its ultimate value after the open space is provided,
- (3) to amend the bye-laws so as to secure higher standards of sanitation including those of the 63½° rule for lighting and ventilation for all new houses, and
- (4) to enact that no old house shall have any new storey added to it, or in any other way be substantially altered, unless it is made to satisfy the higher standards at least in the matter of lighting and ventilation

* I quite approve of the policy recommended by a Municipal Committee for securing *ultimate* adoption of the 63½° standard by making a house-owner altering his house set it back to half the distance from his boundary required by the 63½° rule in anticipation of a similar set-back being subsequently enforced on the other side of the boundary

23. When the law and bye-laws have been amended as suggested above, compensation based on the difference between the primary and the ultimate values of the property acquired for open spaces will not be heavy, and it will be possible to undertake the provision of open spaces for the benefit of a large number of houses every year. At the same time substantial assistance will have been given to the owners of condemned rooms, for the cost of the necessary improvements of a particular house will be far less when a large common open space is provided for all the abutting houses at public expense than if each owner is left to provide the full amount of open space he himself requires in his own land.

J P ORR,
Chairman,

City of Bombay Improvement Trust

Bombay, 6th January 1914

Extract from Mr 'Orr's evidence given before the Bombay Development Committee on the subject of legislation necessary for slum improvement

(referred to on page 58)

Q —With reference to the provision in congested areas of what you regard as the prime necessity of light and air, would you tell us, roughly speaking, what additional powers would be necessary for the Municipality to take measures to that end ?

A —They have to deal with new and old houses, and the two should be treated separately. As regards new houses, a Municipal Committee have already expressed themselves in favour of modifying the bye-laws. I think for the most part no legislation is required to insist upon a man building a house in a new site so as to ensure compliance with what in the Improvement Trust we call the $63\frac{1}{2}^{\circ}$ rule. There is a question whether the space provided as the external air space round the house should be provided in the man's own land, or whether the space available outside his own land should also be taken into consideration, and the view that the Committee have taken is that where there is quite a new area and where land is cheap the man should be required to satisfy the $63\frac{1}{2}^{\circ}$ rule in his own land. On my pointing out that this was rather severe where land is expensive, the Committee have adopted the view that if there are two neighbours each man's space may be counted towards his neighbour's space, so that if between two houses each 60 feet high there is a 30-foot space, that will satisfy the $63\frac{1}{2}^{\circ}$ rule, even if 10 feet be in one man's land and 20 feet in the other man's land. As regards new houses then the $63\frac{1}{2}^{\circ}$ rule can be enforced under bye-laws without any increase in the Municipality's powers.

Then comes the question of old houses already existing, and for those I suggested in my lecture last year that legislation is required enabling the Municipality to take measures similar to those taken in England under

Part II of the Housing and Town Planning Act, the chief measures recommended being that the Health Officer should be empowered to condemn particular rooms as unfit for human habitation and that if there is a congested area with houses very ill-arranged, and if the Municipality of their own motion or at the request of any of the owners of these houses acquire and remove a house in the middle, by the removal of which the surrounding houses get more light and air, then the Municipality shall be able to charge a certain portion of the cost of that acquisition to the owners of the properties improved by the removal of the obstructive house.

Another measure I have recommended is that, as in England, the Municipality should have power to acquire part of a house, and should not be compelled to acquire the whole. That has a very important bearing upon a very large portion of the congested area in Bombay where houses are arranged in long parallel streets. There is generally a 3 or 4-foot gully in the middle between two parallel streets so that the rooms in the front facing the streets are well lighted and ventilated, whereas the back and side rooms are inadequately supplied with light and air. The Trust are now, in their latest scheme, showing how that kind of arrangement can be dealt with. They are simply broadening the 3-foot gully between the two rows of houses and providing a 20-foot space between them so that in each house there will be a room facing the rear open space and a room facing the street and the whole of the rooms in the house will be properly lighted and ventilated. But as the Act now stands, the Trust or the Municipality can only effect this alteration of the houses after acquiring the whole house. This is not the case in England where local authorities are empowered to acquire part of a house. I think, therefore, that the Municipality or the Trust should be empowered to acquire only a part of the house, leaving the remainder in the possession of the owner and requiring him to bring it into a sanitary condition.