workmen, on these conditions:—that in the future, no higher rate of wages shall be demanded, nor shall any reduction be made in rates now assented to, except on three months notice from the respective parties proposing the change. This was agreed to by the workmen, and contracts are now taken with confidence that no strikes will intervene during the specified three months.

It is a great pity, that some means can not be devised to do away with this continual conflict between capital and labour, the employer and his employee, on principles that shall be just to both parties-especially as their respective interests are really identical, although to so many of them apparently the reverse. Is there any plan so likely to effect this object as the co-operative one, hinted at in the March number of this Journal?

## DISINFECTANTS AND SANITARY PRECAU-TIONS.

The arrival of spring, and the breaking up of the winter's frost, has liberated a vast amount of filth, which has been accumulating for some months past; necessitating a general cleaning up, and the disinfecting of many spots and localities in our cities and towns, if the health of their inhabitants is to be conserved. The beneficial efforts put forth by the Board of Health and Medical Health Officers for this city, during last summer, was shown by the diminished number of deaths by zymotic or preventible diseases during the year, as compared with previous years (See Health Report, Vol. VI, p. 319); and if similar or more energetic action be taken during the ensuing spring and summer, there is no doubt but the usual death rate may be still further diminish-The duty of Municipal Authorities is, undoubtedly, to see that nothing is neglected that can reasonably be done to improve our rates of mortality, or prevent the spread of any epidemic or contagious diseases, should any such visit our cities or towns during the coming season. following Report on Disinfectants, by Dr. Letheby, the Medical Health Officer for the City of London. England, in reference to last year's operations of the board of Health will be found both interesting and useful:-

"The several disinfectants which I have largely tested are the following:-

- Chlorine gas.
- 2. Chloride of lime.
- 3. Carbolate of lime.
- 4. Carbolic acid.
- 5. Chloride of zinc (Sir William Burnett's fluid).
- 6. Chloride of iron.

7. Permanganate of potash (Condy's liquid).

8. Animal charcoal.

Each of these disinfectants has its own particular value, and may be used on certain occasions in preference to any of the others: thus

1. Chlorine gas, being a very diffusive body, is best suited for the disinfection of places which cannot easily be reached by other disinfectants. have used it largely for the disinfection of the vaults of churches where the atmospere has been so charged with offensive and dangerous organic vapors, let loose from the contents of the decaying coffins, that the workmen could not enter the vaults with safety. In this manner all the vaults of the city churches have been disinfected, and the contents of them put in order and covered with fresh mold. I have found also that chlorine is best suited for the disinfection of rooms where. as is the case with the poor generally, the occupant cannot be removed for a thorough cleansing; and I have employed it with great advantage in places where persons have been sick with fever, scarlet fever, small-pox, and cholera. The process which I adopt is the following :-About a teaspoonful of the black oxide of manganese is put into a teacup, and there is poured over it, little by little, as occasion requires, about half a teacupful of strong muriatic acid (spirit of salt). In this manner the chlorine is gradually evolved, and the action is increased, when necessary, by stirring the mixture, or by putting the teacup upon a hot brick. As chlorine is heavier than atmospheric air, it is best diffused through the room by putting the mixture upon a high shelf. The quantity of chlorine thus diffused should never be sufficient to cause irritation to the lungs of those who occupy the room, and yet it should be sufficient to be distinctly recognizable by its odor. If it be properly managed, the chlorine may be thus diffused through the atmosphere of the room, even during its occupation by the sick.

2. Chloride of lime has been very largely used in the city during the recent epidemic of cholera. The inspectors have sprinkled it upon the floors of the houses occupied by the poor, and have scattered it about the cellars and yards. In some cases it has been used with water for washing the paint work and the floors of rooms. Altogether indeed, with an average staff of 45 men, we have used rather more than seven tons of chloride of lime in this manner, in disinfecting every week about 2000 of the worst class of houses in the city, and

the results have been most satisfactory.

3. Carbolate of lime, which is a mixture or rather a chemical compound of carbolic acid and lime, has been used in many cases where the smell of chloride of lime or its bleaching action has been obiected to. It has been used by dusting it by means of a dredger over the floors of rooms and cellars; but as the disinfecting power of this substance is destroyed by chloride of lime, it is of great importance that they should not be used together. The carbolate of lime which we have employed contains 20 per cent of carbolic acid: it is essential that this should be its minimum strength, or its power is not sufficiently effacious. The strength of it may be ascertained by treating 100 grains of it with sufficient muriatic acid, diluted with its own bulk of water, to dissolve the lime, when the