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NOTE AND COMMENT.



T the commencement of a New year we appear before our patrons and subscribers with a confidence engendered of our efforts during the past. We have endeavoured during the twelve months that have gone by to carry out the promises made in our prospectus of last January, and to meet as far as possible the wishes of our subscribers.

The year that has passed has been of some importance scientifically speaking. Foremost amongst discoveries of the day are the various uses of electricity which have been either introduced or perfected during 1881. The Paris exhibition has of course done much to bring into prominence the recent discoveries in this direction and the world at large has been more astonished at the knowledge of what has been already done, than they could be at the news of a really new discovery.

The question of the storage of electric power has been fought out over the new "box of electricity" over which the papers went into such raptures, until compelled by the logic of plain facts to admit the absurdity of their former claims, while acknowledging a step in the forward direction.

The progress during the year has been most marked however, in a branch of science which closely concerns our every day life in the sanitary arrangement of our homes. The most important part of this progress has been in the education of the public as to the need for, and possibility of preventing sickness and death; it is the most important, because an educated and intelligent public opinion is essential to the success of all hygienic measures, for nearly all of these involve a certain amount of trouble and expense. People are now beginning to understand the value of pure water, the importance of

so disposing of excreta and garbage as to insure that the air we breathe, shall be unpolluted by the products of their decomposition, and the fact that disease causes suffering and pecuniary loss, not only to the individual but to the whole community. Those who have learned this lesson are the patrons of the skilled plumber, of the competent sanitary engineer, of the schools where the health of the children is provided for, of the physicians who are known to take an interest in prevention as well as cure.

This educated public opinion is demanding more exact knowledge of the causes of disease, and the demand is creating the supply. Investigations are going on; registration of deaths, and to some extent of disease, is being established and made more complete; the effects of bad drainage, overcrowding, polluted water, and contagion, are becoming better known, and an epidemic is no longer considered to be an unavoidable dispensation of Providence, any more than a great fire, or a railway collision. And so fast as the causes of disease are understood, the ingenuity and technical skill of the nineteenth century is applied to providing the means of destroying these causes. The announcement by Pasteur, or Koch, or Burdin-Sanderson, of the discovery of a new fact in the life history of some minute and apparently insignificant organism, at once becomes a basis for means of disinfection provided by the chemist or engineer, or for legislation in preventing the spread of disease.

Many pseudo discoveries, false facts, and absurd theories, with regard to sanitation are now being announced, which to a superficial observer tend to bring discredit on the whole subject; but there is nevertheless a real advance, an advance which we welcome, and to the record of which we have devoted much space during the year past.

Space will not permit a more elaborate retrospect, even if such were desirable. The only use of dwelling upon the past is to urge us on to make still greater efforts for the future, and 1882 will probably bring forth the fruits of much that has been only sown in 1881.

To these, and all other discoveries throughout the year we think our readers have found that we have been alive. We have endeavoured, as we promised, to keep up a record of the doings of the scientific world, but in so doing we have been careful not to neglect the nearer