



THURSDAY, DECEMBER 29, 1921.

Editorial and Publishing Offices:

MACMILLAN & CO., LTD.,
ST. MARTIN'S STREET, LONDON, W.C.2.

Advertisements and business letters should be
addressed to the Publishers.

Editorial communications to the Editor.

Telegraphic Address: PHUSIS, LONDON.
Telephone Number: GERRARD 8830.

Smoke Abatement.¹

THE final report of Lord Newton's Committee on Smoke and Noxious Vapours Abatement, appointed nearly two years ago by the Minister of Health, makes its appearance at an opportune time. The conditions affecting the supply and distribution of coal are gradually becoming more normal, and we are looking forward to the time when its consumption will more nearly accord with the country's needs. The recent disturbance in the coal trade and the absolute futility of the wasteful strike have taught us many lessons which it would be the height of unwisdom not to lay to heart. We have learned, for example, the imperative necessity for more economy in the consumption of our coal. There is a wider recognition of the fact that our methods of using it as fuel are extravagant and wasteful, and that we get no adequate return of its potential value. We have realised that heat and power are bound, for at least some years to come, to cost us more than they did in pre-war years. This question affects everybody; it is, in fact, at the root of the country's well-being and prosperity. We ought, therefore, to see that all possible means are taken to ensure that in its use we get the value of our coal. It is notorious that under our present systems we get only a fraction of that value. It is not too much to say that if the country's fuel were treated in accordance with the teaching of science its present high price would be largely, if not wholly, counterbalanced.

Another lesson which the recent scarcity of coal

¹ Committee on Smoke and Noxious Vapours Abatement. Final Report. (London: H.M. Stationery Office, 1921.) 6d. net.

brought home to the dwellers in our towns is the delight and the blessing of a pure atmosphere. During the coal strike the public Press literally teemed with expressions of pleasure and gratification in the enjoyment of a cleaner and clearer air. London enjoyed vistas hitherto unperceived, and Manchester, Leeds, and Sheffield had the unwonted luxury of an uninterrupted view of the heavens and the sight of a distant landscape. The man in the street naturally asked himself whether, with the anticipated return of prosperity, it was absolutely necessary that we should revert to the former condition of things. Interested parties are apt to preach that a smoky atmosphere is an index of the country's industrial activity. Undoubtedly it has been so in the past. But the conditions of to-day are not those of even a dozen years ago. Science has pointed to much in the way of amelioration, and there is absolutely no reason why the charm and healthful pleasure of a clear atmosphere should not continue to be enjoyed, not only in London, but even in the busiest of our manufacturing towns, if public opinion were resolute to secure it.

The Report of Lord Newton's Committee, admirable as it is in many respects, affords no fresh information to those who have studied this question of smoke, its cause, and the methods of its abatement. The evil has been with us since the time of Edward I., and has steadily increased with the growth of our population and the development of our manufacturing industries. It has probably already passed its worst phase. Economic influences are at work tending to mitigate it. Legislation has made, from time to time, feeble attempts to deal with the nuisance, but Governments, afraid of any interference with industry, have been loth to attack the problem in a statesmanlike fashion, and municipal authorities, with whom the administration of the law rests, for reasons which need not be particularly specified, have been even more reluctant to take action. The consequence is that England has the smokiest and smuttiest atmosphere, taking it as a whole, of any country in the world. The condition of many of the smoke-begrimed towns in the manufacturing districts of Lancashire, Yorkshire, and Staffordshire is a disgrace to a civilised community.

The Committee frames a strong indictment against local authorities throughout the country who have failed to do their duty. In its opinion the provisions of the existing law are strong enough to combat the evil if they were only enforced. It must be said, however, in bare justice to these authorities, that certain of these provisions make it very difficult

to secure the conviction of offenders. The indictable offence consists in the emission of *black* smoke. Two policemen acting on behalf of the prosecution—that is, the sanitary authority—may swear that in their opinion the smoke was black; three civilians, on behalf of the defence, will swear that in their judgment it was grey. Again, if the offender can satisfy the bench that he has employed the best practicable means, consistently with carrying on his industry, to abate it, he is exculpated. It is inevitable that there should be a conflict of testimony as to what, in such circumstances, are “the best practicable means.” It is equally inevitable also that magistrates, local J.P.’s for the most part and swayed by local influences, should be slow to convict. The sanitary authority finds itself powerless, and further action is estopped. The Committee is fully alive to these difficulties and blames the central authority.

“The chief factor,” it says, “in the failure to deal with the smoke evil has been the inaction of the central authority. No Government has, for many years, taken any action with the exception of appointing committees, whose labours have led to little or no result. Smoke and air pollution are, in our opinion, a national question, and we consider that it is useless to expect that it will be adequately dealt with by local authorities unless they are subject, when necessary, to the stimulus of Government. It is for this reason that we recommend that defaulting authorities should be compelled to act by the Minister of Health.”

The prevalence of smoke pollution in this country is mainly due to the indiscriminate and wasteful use of *raw* coal for all purposes, whether industrial or domestic. Such is the finding of the Committee. This is already acknowledged by everyone who has devoted any attention to the question of smoke abatement. The problem of so treating coal as to render its combustion practically smokeless is at present the main effort of the Fuel Research Board acting under the direction of the Department of Scientific and Industrial Research. As an economic question the problem admittedly has its complexities. There is no difficulty in coking or semi-coking coal so that it shall burn with a smokeless flame, *at a price*, depending upon the value of—that is, the market for—the by-products of the coking. Hitherto the efforts to introduce such smokeless fuel have not been economically sound, or at least have failed in view of present conditions. Whether the efforts of the Fuel Research Board will solve the problem remains to be seen. It cannot be doubted that the Board’s experimental investigations will afford valuable data towards its solution. Such investigations require time, and it is not improbable that Govern-

ment may take advantage of that fact to delay any further action with regard to legislation on smoke abatement. There is, however, no real reason why the Ministry of Health should decline to act at once on the recommendations of Lord Newton’s Committee. The amending legislation required would be comparatively slight, and its passage through Parliament, in view of what the Committee recognises as the strong body of educated opinion which is extremely dissatisfied with present conditions, should offer no insuperable difficulties.

The recommendations are divided under two heads: (1) with regard to industrial smoke; (2) with regard to domestic smoke. As regards industrial smoke, the obligation to use “the best practicable means” to abate it must still devolve upon the occupiers of any business premises, the onus of proof that such means are the best practicable to rest upon the manufacturer. The duty of enforcing the law should be transferred from the local sanitary authorities to the county authorities—*i.e.* to Councils of counties and county boroughs. The Minister of Health should appoint competent officers to advise and assist local authorities and manufacturers with regard to difficult smoke problems, these officers to report annually on the steps taken and the progress made in the suppression of avoidable smoke. This recommendation is obviously based upon the Committee’s knowledge of the operation of the Alkali, etc., Works Regulation Act, which has admittedly worked successfully and with no great friction or hindrance to the industries concerned. Lastly, as regards industrial smoke the Committee recommends that the law should enable much larger fines to be imposed than at present. Experience has shown that “the fines at present inflicted are too trivial to be an effective deterrent, manufacturers in many instances preferring to pay the fine rather than take the necessary steps to abate the nuisance.”

As regards domestic smoke the Committee recommends that the Central Housing Authority should, at their discretion, decline to sanction any housing scheme unless specific provision is made in the plans for the adoption of smokeless methods of heating, and that local authorities should make by-laws requiring the provision of smokeless heating arrangements in new buildings, such as hotels, clubs, offices, and the like. It further recommends that Government should encourage the co-ordination and extension of research into domestic heating generally, and that every encouragement and facility should be given to gas and electricity undertakings to increase and cheapen the supply of gas and electricity, and that

the practice at present followed by some municipal authorities of over-charging for gas and electricity in order to relieve the rates should be discontinued.

Certain of the Committee's recommendations are, it must be confessed, rather in the nature of counsels of perfection, but the Report is, on the whole, a business-like document, and the Committee's proposals are, as it says, "prosaic but practical." The Report is unanimous and commendably short and to the point. As the latest word on the important question with which it deals, it is well worthy of the attention and consideration of all interested in the pressing problem of smoke abatement.

Christian Theism.

Studies in Christian Philosophy, being the Boyle Lectures, 1920. By the Rev. Prof. W. R. Matthews. Pp. xiv+231. (London: Macmillan and Co., Ltd., 1921.). 12s. net.

THIS book may be commended to the notice of such as wish to know what can be said by a theologian possessing the broad outlook of the philosopher, and equipped with a knowledge of recent philosophical literature, as to the intellectual claims of Christian theism; it represents a good type of the kind of justification of theistic belief with which a Christian would desire thoughtful inquirers to be acquainted. It does not profess to break new ground, and, save for reflections on minor points, it does not offer critical or constructive contributions such as have not in essence been made before; but it is characterised by ability in a degree sufficient to engender curiosity as to its possible sequels, at which its author hints. If, in a later volume, the author intends to deal with the Christological problem on lines suggested by his remark (p. 54) that Christian theology has often treated the relation of Jesus to the Father "as a puzzle in ontology rather than a moral fact," his future readers will be interested to see how he will avoid the ontological issue, and how, in emphasising the moral aspect of the relation in question, he will evade difficulties in connection with theodicy. Another *obiter dictum* (p. 164) concerning the reconcilability of the tritheistic and the modalistic or unitarian interpretations of the doctrine of the Trinity arouses a similar curiosity; and if the author's hope of effecting such a reconciliation be based on his objection (p. 226) to the distinction between adjectival and substantival existence as a misleading one, it may be worth while to point out to him beforehand that

NO. 2722, VOL. 108]

the objection which he has urged does not apply to the real distinction, without which logic would become impossible, but only to a perverse misrepresentation or obliteration of it.

But, to speak of the present work itself, the lectures deal with such subjects as the Christian view of the world, ethical theism, the moral argument, and the ideas of personality and creation; and their main purpose is to show that, among the various forthcoming endeavours of philosophy to explain or interpret the world and man, Christian theism is not only a "live option," but is also intellectually the most satisfactory—the best inductive hypothesis. With this main position, and with the conclusions of all (save one) of the author's lectures, I am in too close agreement, in the main, to be a useful critic; but, inasmuch as expression of criticism or of difference of opinion is what a writer chiefly hopes for from a reviewer, I may the less reluctantly confine myself, in the remainder of this notice, to the chapter on the moral argument for theism.

This chapter, the most brightly written in the bright and lucid volume, is to me unconvincing. Fully to explain why would involve a general discussion of the whole theory of value; consequently I must risk being but imperfectly intelligible to my readers until they also have become readers of Mr. Matthews's book in taking for consideration here a few of his contentions as they stand, and in isolation from the general theory which they presuppose.

First, though one may agree with his proof that naturalistic ethic is absurd, and that the authority of moral judgments cannot be explained in terms of their survival-value, or as a matter of man's relation to his physical environment, one may dispute that theism is then directly thrust upon us as the only alternative. Man's environment includes humanity, and the capacity for thought which may be a result of adaptation to environment, once acquired, can thenceforward be applied to matters of the non-utilitarian kind. Man's morality, the exposition of which is but theoretic judgments on facts pertaining to the practical or conative side of human experience, thus calls no more for the direct invocation of a *Deus ex machina*, or of a *Logos endiathetos*, than does man's mathematical science. The same applies to man's moral progress. Pluralism, which Mr. Matthews here rules out, as it seems to me, for an irrelevant reason, may hardly account for such moral harmony as we find, and may promise no ultimate achievement of the highest good; but that it is irreconcilable with such knowledge as we have concerning moral