

smoke is absolutely necessary in the furnaces to prevent the spoiling or burning of the steel, but there is no necessity when the smoke leaves the furnaces to discharge

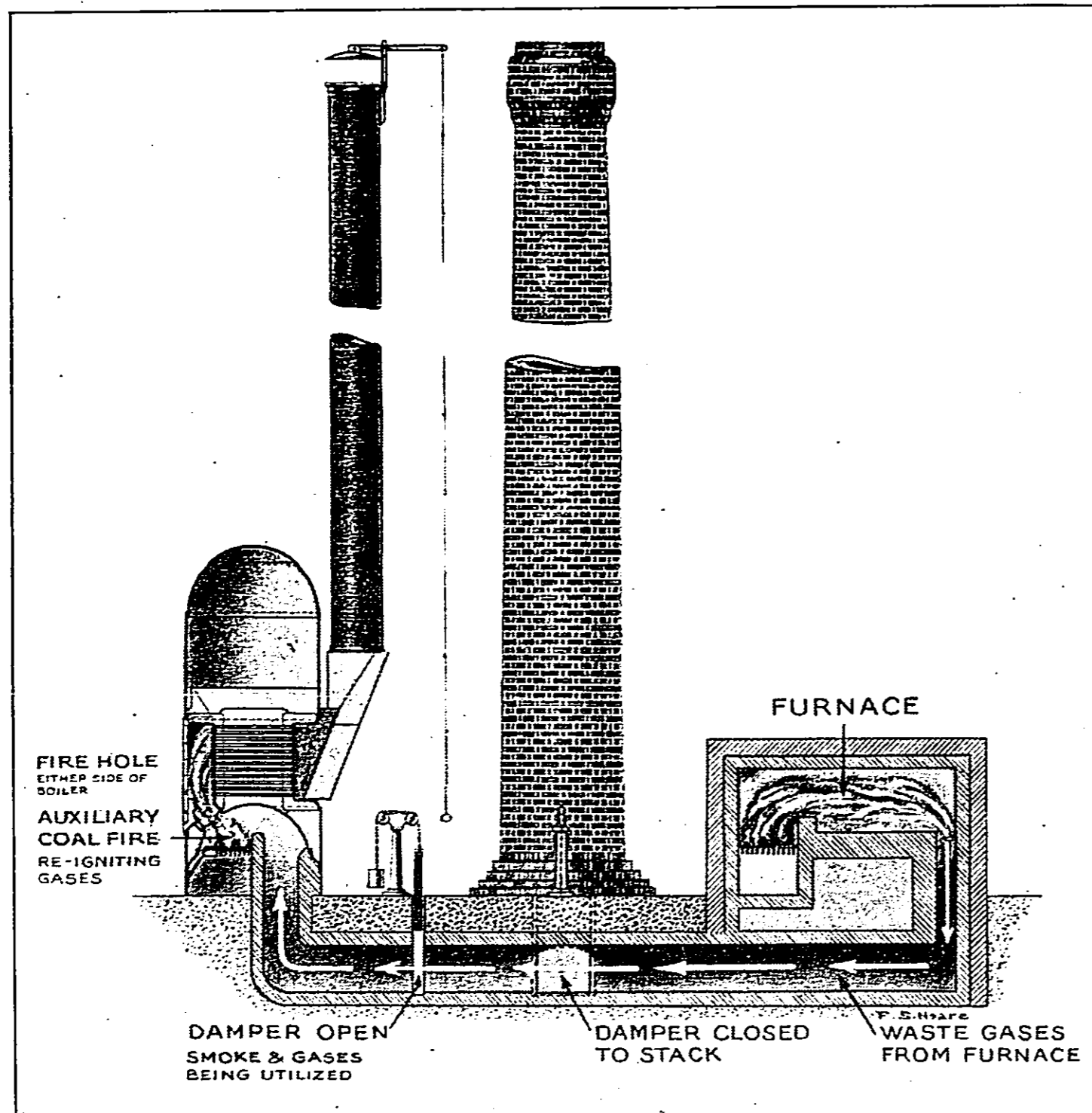


Fig. 37.—Cochran Improved Waste Gas System.

it into the atmosphere, for it can, as shown, be passed through waste heat boilers or furnaces and be utilised.

It is the duty of all who own furnaces to put down waste heat boilers or furnaces to utilise their waste heat, on the ground of economy, but even more so is it a duty in the interests of Public Health.

CHAPTER XIII.

PUBLIC HEALTH (SMOKE ABATEMENT) ACT, 1926.

Summary of the Act and Suggestions.

Section 1.

Sub-Sections (1) (a) and (b) Extension of meaning of smoke.

Under *Section 91* of the Public Health Act, 1875, any chimney (not being the chimney of a private dwelling-house) sending forth black smoke in such quantity as to be a nuisance is to be deemed a nuisance liable to be dealt with summarily under *Section 94* and later sections of that Act.

The limitation imported by the word "black," is removed so that proceedings may be taken even though the smoke is not black, if it is considered to constitute a nuisance.

The expression "smoke" for the purposes of *Sections 91, 92, and 102* of the Act, 1875, is also extended to include soot, ash, grit, and gritty particles.

Smoke of any colour, density, or duration which is not necessary, and can be practically prevented without interfering with the efficient working of the furnace will be a statutory nuisance, also all unnecessary soot, ash, grit and gritty particles.

The chimney of the private dwelling-house should be included in the Act.

Sub-Section (1) (c) and (d) Penalties.

The maximum penalty of £5 which may be imposed under *Section 96* of the Act of 1875, is increased to £50, and the daily penalties of 10s. and 20s., which may be imposed under *Section 98* of the Act, are increased to 40s. and £5 respectively. By *Sub-Section (2)* similar amendments to those above-mentioned are made in the Public Health (London) Act, 1891.

The heavier penalties will be a deterrent to recurring nuisances, and courts will impose them when it is realised that the smoke complained of is an unnecessary waste of coal, and a pollution and poisoning of the atmosphere.

Sub-Section (1) (e) Exempted processes.

By *Section 334* of the Act, 1875, it is provided that nothing in that Act is to be construed to extend to mines so as to interfere with or to obstruct their efficient working, or to certain specified metal processes, so as to obstruct or interfere with those processes. As might be expected the Public Health (London) Act, 1891, contains no corresponding provision.

By the new Act some additional processes (namely, re-heating, annealing, hardening, forging, converting and carburising iron and other metals) are added to the processes specified in *Section 334* of the Act of 1875, and the Minister may by Provisional Order amend *Section 334* so as to include other industrial processes in the exemption.

On the other hand, the sub-section allows the Minister after five years from the date of the present Act to make a Provisional Order removing any exemption enjoyed under *Section 334* of the Public Health Act, 1875, as amended by the new Act in respect of any process so far as smoke nuisances are concerned.

The Provisional Order will in both cases be subject to confirmation by Parliament and may contain conditions and limitations subject to which the inclusion or exclusion is to take effect.

The processes named in *Section 334* of the Public Health Act, 1875, and the additional processes included in the said section by the New Act, are not wholly exempt, but only partially, up to the point of practicability, or in other words they are permitted to emit as much smoke as is absolutely necessary in the carrying on of the said processes. But any smoke made by the processes named—which is not necessary, and the prevention of it will not interfere or obstruct the processes—is a statutory nuisance and proceedings can be taken for its prevention.

Sub-Section (3) Defence of "best practicable means."

This sub-section enables a person charged with sending forth smoke from a chimney to plead that he has used the best practicable means for preventing a nuisance having regard to cost and to local conditions and circumstances. This defence is restricted to a nuisance from smoke other than black smoke. When the smoke is black smoke the defence is not available.

The expression "best practicable means," refers not only to the efficiency of the plant, but also to the manner in which it is handled.

Sub-Section (4) Notice of Nuisance.

Any officer of the Local Authority duly authorised to act in the abatement of smoke nuisance must as soon as practicable after he becomes aware of a smoke nuisance notify the occupier of the premises on which the nuisance exists, and if the notification was not in writing, must

confirm it in writing within 24 hours of becoming aware of the nuisance.

The intention is that immediate notice shall be given to the occupier of the premises on which the nuisance exists. This may not be possible in all cases but the occupier should be notified as soon as practicable, not necessarily in writing, in the first instance in order that he may investigate the cause of the nuisance without delay. In this way co-operation between Local Authorities and industrial and other business interests will be facilitated.

Section 2.

Bye-Laws as to smoke standards.

Any Local Authority may make Bye-Laws regulating the emission of smoke of such colour, density, or content, as may be prescribed by the Bye-Laws. Where such Bye-Laws are in force the emission of smoke of the character so prescribed for such period as is laid down in the Bye-Laws is to be presumed to be a nuisance.

Power is given to the Minister to require a Local Authority to make such Bye-Laws. The Bye-Laws will in effect set up a standard. If that standard is exceeded the onus of proof that a nuisance has not been committed will be upon the person charged. If there is no such Bye-Law the onus of proving nuisance rests with the Local Authority.

The usual provisions as to making, confirming and publication of Bye-Laws are applicable, and it is desirable that any proposed Bye-Laws should be forwarded in draft before being formally adopted by the Local Authority.

By *Sub-Section (2)* the Authority for making these Bye-Laws in London (except as regards the City of London, and the Port of London) is the London County Council. The Bye-Laws made by that Council will,

however, be enforceable in the Metropolitan Boroughs by the Councils of those Boroughs.

The Minister of Health should fix the smoke standards, the amount of smoke necessary in accordance with what the chimney serves, to ensure not only uniformity of administration of the Act, but justice to all, and prevent some Authorities allowing 20 minutes in the hour when only 2 minutes are necessary.

Section 3.

Meaning of "Chimney."

The expression "chimney" (as used in *Section 91* of the Act of 1875, in *Section 24* of the London Act of 1891, and in the New Act) is defined so as to include structures and openings of any kind whatsoever capable of emitting smoke.

Section 4.

Extension of the Alkali, etc., Works Regulation Act, 1906.

Section 27 of the Act of 1906 contains a list of noxious or offensive gases to which the Act applies, and in the First Schedule to the Act there is a list of works which are not to be carried on unless certified to be registered by the Minister under Part III of the Act. These works are subject to inspection by Inspectors of the Minister. The owners of such works are required by *Sub-Section (1)* of *Section 7* of the Act of 1906, subject to certain qualifications therein specified to use the best practicable means for preventing the escape into the atmosphere of noxious or offensive gases and for rendering such gases where discharged harmless and inoffensive.

The New Act gives the Minister power to make orders (a) extending the list of noxious or offensive gases

mentioned in *Section 27* of the Act of 1906, and (b) extending the list of works mentioned in the First Schedule to the Act.

The order may prescribe the qualifications subject to which *Section 7 (1)* of the Act of 1906 is to apply in the case of any noxious or offensive gas, or of any works included in the order.

The order to be laid before both Houses of Parliament.

Sub-Section (3) of *Section 4* gives the Minister power to authorise an Inspector to enter and inspect any work which is likely to cause the evolution of any noxious or offensive gas, notwithstanding that the Act of 1906 may not apply to such work. There is already power in *Section 12* of the Act of 1906, to inspect works liable to be registered under the Act. The intention is that an Inspector should be authorised to make investigations in works not included in the First Schedule to the Act of 1906, and not already registrable, but from which noxious or offensive gases may be evolved.

Section 5.

Bye-Laws as to New Buildings.

This section enables Bye-Laws to be made in London by the County Council, and outside London by the Councils of boroughs and urban districts requiring the provision in new buildings other than private dwelling-houses of such arrangements for heating or cooking as are calculated to prevent or reduce the emission of smoke.

As under *Section 2* the usual provisions as to the making, confirming, and publication of Bye-Laws are applicable and drafts should be forwarded to the Minister before any Bye-Laws are formally adopted.

The Minister is advised that the words "other than private dwelling-houses" in this section do not have the effect of excluding hotels or clubs.

Section 6.

Combination of Local Authorities.

Two or more Local Authorities outside London may combine, and may appoint a joint Committee for carrying out their duties in respect of smoke nuisances.

Section 7.

Default Powers.

Where a Local Authority outside London (not being the Council of a County Borough) have failed to carry out their duties in abating smoke nuisances, or have failed to make Bye-Laws under the New Act after being required to do so, the Minister may transfer their power to the County Council. The expenses incurred by the latter Council in discharging the duties will be payable by the Local Authority.

Power is given to the Minister to hold an Inquiry as to the manner in which a Local Authority have carried out their duties with respect to smoke nuisances, whether or not a complaint has been received from the County Council.

As regards London, provision is already made in the Public Health (London) Act, 1891 (*Sections 100 and 101*), for the transfer to the County Council of the powers of the Council of a Metropolitan Borough, who have made default in carrying out their duties.

Section 8.

Information as to performance of Duties.

Local Authorities and County Councils are to furnish such information as the Minister may require as to their proceedings with regard to the abatement of smoke nuisances.

Section 9.

Saving as to Sea-going Ships.

The section exempts from the provisions of this Act (but not from the provisions of previous enactments in force) any ship which is habitually used as a sea-going ship. The Act applies to all other ships.

(There is no reason for the exemption of any ships beyond the point of practicability.—AUTHOR.)

Section 10.

Research.

A Local Authority alone or in combination with other Local Authorities may undertake investigations and researches into problems relating to atmospheric pollution and the abatement of smoke nuisances, or may contribute to the cost of similar investigation and researches undertaken by other bodies or persons.

The Minister may make rules imposing restrictions or conditions on the exercise of these powers. It is not proposed to make rules unless experience shows that they are necessary. The absence of rules will not prevent Local Authorities from exercising the powers conferred by the section.

Section 11.

Crown Premises.

This section relates to smoke nuisances existing on premises for the public service of the Crown. The procedure to be followed is that the Local Authority should report the circumstances to the appropriate Government Department, and it will be then for the responsible Minister to enquire into the nuisance, and if satisfied of

its existence to take the steps necessary for its abatement and for the prevention of its recurrence.

Local Authorities should appoint competent persons, to act as Smoke Inspectors, who are expert in smokeless and economical coal combustion in all sorts of boilers, furnaces, and fireplaces, also able to assist manufacturers in the difficult problems of practical smoke prevention, and the Chief Smoke Inspector should have statutory authority to prosecute in a court of summary jurisdiction.

The Minister of Health should appoint one or more competent officers—smoke abatement experts, who have had exceptional experience—to advise and assist Government defaulters, Local Authorities, and manufacturers, with regard to difficult smoke problems, and with power to proceed against defaulters. Such officers should report annually to the Minister of Health of what has been done nationally to prevent unnecessary smoke.

CIRCULAR 759.

COUNTY COUNCILS AND SANITARY
AUTHORITIES.

(England and Wales.)

MINISTRY OF HEALTH,
WHITEHALL, S.W. 1,
17th February, 1927.

SIR,

Public Health (Smoke Abatement) Act, 1926.

1. I am desired by the Minister of Health to call the attention of the Council to this Act which has recently

received the Royal Assent. The Act comes into operation on the 1st of July next. The principal provisions of the Act deal with the following matters :—power to take proceedings in respect of a nuisance from “smoke” to include soot, ash, grit, and gritty particles; increase of penalties; power to make Bye-Laws; prescribing standards as to the emission of smoke; power to make Bye-Laws respecting cooking and heating arrangements in new buildings other than private dwelling-houses; power to the Minister to authorise the County Council to carry out duties with regard to smoke abatement on default of the Sanitary Authority; and power to the Minister to extend the operation of the Alkali Act.

2. The Minister desires to call the attention of Local Authorities to the following matters in connection with the administration of the law with regard to smoke abatement :—

(1) General Administration.—The new Act will give Local Authorities useful additional powers; but results must depend primarily upon good administration and this is a matter which rests in the hands of the Local Authorities. By careful administration and close co-operation it is clear that much more can be done to reduce the emission of smoke.

In this connection it will be of advantage if the officials responsible for the abatement of smoke nuisances are specially qualified, and the Minister is glad to know that an increasing number of officers are taking advantage of special courses of training.

(2) Regional Committees.—Some Regional Committees have recently been appointed to consider the smoke problem in their districts and have rendered useful service. It appears to the Minister that there are advantages to be gained from the appointment of

such a committee with either advisory or executive functions as may seem fit in every area where there is a smoke problem common to a number of Local Authorities. Such a committee can do much towards uniformity of administration, a fuller investigation of the common problem, more thorough co-operation with industrial interests and in general raising the standards of administration throughout the area.

It may also be possible to arrange that any exceptionally qualified official in the service of any of the constituent Authorities may be at the disposal of the other Authorities for any problem of special difficulty.

(3) Standards.—The provisions in the Act in this matter should prove of much administrative service. They put on a legal basis a practice which has already been adopted by a number of Local Authorities.

The Minister is advised that at present it is not practicable to apply standards to any but black smoke, and the kind of Bye-Law which it will be possible to make under the section will provide that there shall be a presumption of a nuisance if for instance black smoke is emitted for two minutes in the aggregate within any continuous period of thirty minutes. This is a standard which is already applied in some cases.

It may not be considered practicable in every district to apply so strict a standard at once, but it appears to the Minister that in the absence of special circumstances it should be the aim gradually to reach this standard.

The Minister is of opinion that Bye-Laws under this section should be made in every considerable industrial district.

- (4) Exemption.—The exemption which is already given to certain industrial processes by the Public Health Act, 1875, is extended by the New Act to certain additional metal processes. Power is also given by Provisional Order to extend the exemption to other industrial processes.

It is not the intention of the Minister to extend the exemption to additional processes unless there is clear evidence that the exemption is warranted, and that there are real difficulties in the administration of the law as it now stands. The Act also enables existing exemptions to be removed by Provisional Order after a period of five years, and it will be for the occupiers of works to adopt such methods as may be possible for preventing nuisances from smoke, if and when means for doing so are available at reasonable cost, and economic conditions are such that the adoption of these methods may properly be required.

- (5) Private Dwelling-Houses.—The Government did not consider it right at the present time to propose legislation as to the emission of smoke from private dwelling-houses. As regards new houses, much is now being done by Local Authorities and private builders to instal such methods of heating and cooking as will reduce the emission of smoke, and it is desirable that this process should be encouraged. Even in old dwellings much can be done with care to reduce the needless emission of smoke, and it will be well to take advantage of any opportunity which occurs to impress this fact upon house-holders.

- (6) Alkali Act.—Since the Alkali, etc., Works Regulation Act was passed in 1906, consolidating and amending earlier enactments, there have been a number of new processes which on present

evidence should probably be brought within the operation of the Act.

It is the intention of the Minister to consider what extensions should be made, but full opportunity will be given to all interests to put forward their views before any Order is made under the Act.

3. Much progress has already been made in abating nuisances from smoke, and the Minister is convinced that by the wise exercise of the powers which are now vested in Local Authorities and the co-operation of bodies representing industrial interests, much more can still be done in the coming years to reduce the smoke evil.

I am, Sir,

Your obedient Servant,

THE TOWN CLERK, or
THE CLERK OF THE COUNCIL.

J. E. GIBBON,
Assistant Secretary.