STATUTORY RULES AND ORDERS, 1925, No. 1089.

FACTORY AND WORKSHOP. Dangerous and Unhealthy Industries.

THE GRINDING OF CUTLERY AND EDGE TOOLS REGULATIONS, 1925, DATED OCTOBER 26, 1925, MADE BY THE SECRETARY OF STATE UNDER SECTION 79 OF THE FACTORY AND WORKSHOP ACT, 1901 (1 EDW. 7. c. 22) FOR GRINDING OR GLAZING OR PROCESSES INCIDENTAL TO GRINDING IN, OR INCIDENTAL TO, THE MANUFACTURE OF CUTLERY, EDGE TOOLS, SWORDS, BAYONETS, FILES, SAWS, PLOUGHS OR OTHER CUTTING OR PIERCING IMPLEMENTS OF IRON OR STEEL.

In pursuance of section 79 of the Factory and Workshop Act, 1901, I hereby make the following Regulations, and direct that they shall apply to all factories (including tenement factories and tenements thereof in which no person is employed by the occupier) in which is carried on any grinding or glazing, or process incidental to grinding, in, or incidental to, the manufacture of cutlery, edge tools, swords, bayonets, files, saws, ploughs, or other cutting or piercing implements of iron or steel.

These Regulations may be cited as the Grinding of Cutlery and Edge Tools Regulations, 1925.

Regulations 3, 5 (so far as it applies to existing works), 6, 7 (a) and (b) and 8 (a) shall not come into force until three years after the commencement of these Regulations, but save as aforesaid these Regulations shall take effect on 1st January, 1926. From that date the Regulations dated 15th October, 1909, (a) for the Grinding of Metals and Racing of Grindstones, shall be revoked.

Definitions.*

For the purpose of these Regulations—

Cutlery includes knives, forks and spoons of any metal, and steels.

Grindstone means a grindstone composed of natural or manufactured sandstone, or a metal wheel or cylinder into which blocks of natural or manufactured sandstone are fitted.

Abrasive Wheel means a wheel manufactured of bonded emery or similar abrasive.

Grinding, which includes "Whittening" or "Whitening," means the abrasion, by aid of mechanical power, of metal by means of a grindstone or abrasive wheel.

⁽a) S.R. & O. 1909, No. 1155.

* Terms to which defined meanings are given are printed throughout in italies.

Glazing means the abrading, polishing or finishing by aid of mechanical power of any article wholly or partly of metal by means of any wheel, buff, mop, bob, dolly, or band to which any abrading or polishing substance is attached or applied except the process known as "sand buffing" in which articles are polished by means of a mixture of oil and sand applied by hand to a rotating buff.

Racing means the turning up, cutting or dressing of a revolving grindstone before the grindstone is brought into use for the first time.

Hacking means the chipping of the surface of a grindstone by a hack or similar tool.

Exemptions.

- (1) Nothing in these Regulations shall apply to any process--
 - (i) in the manufacture of needles, pins and fish-hooks;
 - (ii) in the manufacture, repair, or sharpening of saws, tools, or instruments for use in machines for the cutting or working of metals; or
 - (iii) in the manufacture, repair or sharpening of saws, tools or instruments for use in the factory or for the purpose of the work thereof except as regards any part of the factory in which one or more persons are wholly or mainly employed in *grinding* or *glazing* processes in or incidental to such manufacture, repair or sharpening.
- (2) Nothing in these Regulations, except Regulation 13, shall apply to any *grinding* or *glazing* of metals carried on intermittently and at which no person is employed for more than 8 hours in any week, unless and until so required by notice in writing from the Chief Inspector of Factories.
- (3) Regulations 3, 5 and 7 (a) shall not apply to any wet grinding where the work being done at the grindstone or abrasive wheel is carried on by mechanical means unless and until so required by notice in writing from the Chief Inspector of Factories.

If the Chief Inspector of Factories is satisfied in respect of any factory or any class of machines that owing to the special conditions or special methods of work or otherwise, any of the requirements of these Regulations can be suspended or relaxed without danger to the health or safety of the persons employed, or the application of these Regulations or some part thereof would for any reason be impracticable, he may by certificate in writing (which he may in his discretion revoke) authorise such suspension or relaxation for such period and on such conditions as he may think fit.

Duties.

Every occupier and manager of any factory to which these Regulations apply, shall be bound to observe the same, and every person who is employed or engaged in any work to which these Regulations apply shall be so bound, except in so far as any duty is expressly imposed on any other person.

In the application of these Regulations to tenement factories, the owner instead of the occupier shall be responsible for the provision and maintenance of the accommodation, appliances, water supply and other arrangements necessary for the observance of Regulations 1, 2, 3, 4 (a), 6, 7, 8 (a), 8 (c), 12 and 14; the keeping of the register required by Regulation 4 (b); and (in the case of rooms occupied by more than one tenant) for the cleaning required by Regulations 8 (b) and 9, and the keeping of the register required by Regulation 10; and so far as is necessary for any of the aforesaid purposes the special Regulations contained in section 87 of the aforesaid Act shall be modified or extended.

Regulations.

- 1. No racing, dry grinding, or glazing ordinarily causing the evolution of dust into the air of the room in such a manner as to be inhaled by any person employed shall be performed without the use of adequate appliances for the interception of the dust as near as possible to the point of origin thereof, and for its removal and disposal so that it shall not enter any occupied room, and for the purpose of this Regulation the appliances shall not be deemed adequate unless they either include:—
 - (a) a hood or other appliance, so constructed, arranged and placed as substantially to intercept the dust thrown off; and
 - (b) a duct of adequate size, air-tight, and so arranged as to be capable of carrying away the dust, which duct shall be kept free from obstruction and shall be provided with proper means of access for inspection and cleaning, and, where practicable, with a connection at the end remote from the fan to enable H.M. Inspector of Factories to attach thereto an instrument necessary for ascertaining the pressure of air in the said duct; and
 - (c) a fan or other efficient means of producing a draught sufficient to extract the dust;

or are such as, in the case of the particular factory or part thereof, or of the particular manufacture, process or operation, in or for which they are used, shall be proved to be at least as effectual for such interception, removal and disposal as such hood, duct and fan would be.

2. Racing shall not be done in any room whilst any person, other than those performing or assisting at the racing, is present, and work shall not be resumed in the room after racing until the

dust has been removed and cleaning as required by Regulation 8 (b) has been carried out, provided that in any factory constructed or taken into use for any of the processes to which these Regulations apply after 1st January, 1926, racing shall not be done except in a special room or place in which no other work is ordinarily carried on.

- 3. In every room in which wet grinding upon a grindstone is carried on there shall be provided and maintained whilst work is in progress either—
 - (a) adequate exhaust and inlet ventilation; or
 - (b) a supply of clean water conveyed by pipes and deposited upon the surface of the *grindstone*, and suitable arrangements to ensure the drainage of the waste water from the *grindstone* trough.

For the purposes of this Regulation the ventilation shall not be deemed to be adequate unless (i) it ensures that the air of the room is renewed not less than 15 times per hour; (ii) it is arranged in such a manner as to secure a continuous movement of the air in a direction from the grinder towards the grindstone; and (iii) the fresh air inlets are so arranged and are of such dimensions that no worker is exposed to a direct draught from them.

- **4.**—(a) All ventilating plant used for the purpose of extracting or suppressing dust shall at least once in every six months be examined and tested by a competent person, and any defect disclosed by such examination and test shall be rectified as soon as practicable.
- (b) A register containing particulars of such examination and test shall be kept in a form approved by the Chief Inspector of Factories and shall be available for inspection by any workman employed in any room in respect of which the ventilating plant is provided.
- 5. In any factory constructed or taken into use for any of the processes to which these Regulations apply after the 1st January, 1926, glazing or other processes, except processes incidental to wet grinding on a grindstone, shall not be carried on in any room in which wet grinding on a grindstone is carried on, nor in any other factory unless there is a minimum distance of 8 feet measured in any direction between the centres of any grindstone and any appliance used for glazing.
- 6. Hacking shall not be done unless with an adequate supply of water laid on at the upper surface of the grindstone, or the grindstone is adequately wetted by other means. The arrangements provided shall be such as to ensure as far as practicable the suppression of dust during the process.
- 7. Wet grinding upon a grindstone shall not be done in any room—
 - (a) in which the height of the room, measured from any part of the floor to the lowest part of the top, is less than 10 feet; nor

- (b) in which the total window area is less than one-sixth of the floor area; nor
- (c) unless all windows are properly glazed and the glass or other material of such windows maintained whole and kept clean.
- 8. In every room in which wet grinding upon a grindstone is carried on—
 - (a) the floor and walls shall be constructed of, or covered with, smooth impervious material, and all shafts, belts, pulleys and drums shall, as far as practicable, be efficiently covered in or a clear space left below such shafts, belts, pulleys and drums sufficient to permit the cleaning required by paragraph (b) of this Regulation;
 - (b) the floor, walls and all other parts of the room, fixtures, and coverings, if any, of shafts, belts, pulleys and drums shall be thoroughly cleaned by clean water or by an efficient vacuum apparatus at least once in every week during which any grinding as aforesaid has been done;
 - (c) Adequate drainage shall be provided by means of the floor sloping towards drainage channels, or by such other means as shall be proved at least as effectual:

Provided that paragraphs (a) and (b) of this Regulation shall not apply to any part of the room or fixtures exceeding 14 feet in height from the floor.

9. In every room where racing, or grinding other than wet grinding upon a grindstone or glazing is carried on, the floor, walls, ceiling or top and all other parts of the room, and fixtures, and all coverings, if any, of shafts, belts, pulleys and drums, shall be properly cleaned at least once in every three calendar months.

Provided that this Regulation shall not apply to any part of the room or fixtures exceeding 14 feet in height from the floor.

- 10. A register containing the dates and particulars of all cleaning done in pursuance of Regulations 8 (b) or 9, and the name and the address of the person performing the cleaning or, when more than one are employed, of the person in charge, shall be kept in a form approved by the Chief Inspector of Factories. Such register shall be available for inspection by any workman employed in any room in respect of which the register is required to be kept.
- 11. No person employed at grinding, glazing or processes incidental thereto shall spit upon the floor, walls or any part of any room in which grinding, glazing, or processes incidental thereto are carried on, nor into or upon any apparatus, plant or fixtures in any such room.

- 12. There shall be provided and maintained for the use of all persons employed in wet *grinding* suitable accommodation for clothing put off during working hours.
- 13. (a) In every room in which grinding is carried on there shall be kept permanently affixed a notice specifying the safe working peripheral speed of every class of grindstone and abrasive wheel in use in such room. Such notice shall specify also the speeds of the shafts or spindles upon which the grindstones or abrasive wheels are mounted and the diameters of the pulleys upon such shafts or spindles necessary to secure such safe working peripheral speeds.
- (b) The occupier or his agent shall, when required by H.M. Inspector of Factories, give all necessary facilities and particulars to enable him to determine the speed of any shaft, pulley or other appliance.
- 14. In every room constructed or converted for use as a grinding room after 1st January, 1926, there shall be provided a minimum distance of four feet six inches between any two grindstones, or three feet if the stones are less than two feet in diameter. This Regulation shall not apply to grindstones made up of blocks of stone inserted into metal frames, nor prevent the use of two grindstones in a saw grinding or other similar machine.
- 15. Every person who is employed or engaged in any work to which these Regulations apply shall make full and proper use of all appliances, facilities or accommodation provided for any of the purposes of these Regulations and shall report forthwith to the owner, occupier, manager or other responsible person any defect in the same.

W. Joynson-Hicks,
One of His Majesty's Principal
Secretaries of State.

Whitehall, 26th October, 1925.

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