

prison medical officer. His one monumental work, which may perhaps best be described as *the biology of the convict*, is still unfamiliar to all but a limited circle.

Goring's work² was based on thousands of data and is stringently biometric in form, but he was no mere measurer, card shuffler and constant computer. He knew his convicts as the trained student of animal behavior knows his organisms—and better, for he had not merely their physical measurements and an intimate personal knowledge and evaluation of their mental characteristics but knew much of their ancestry and family associations. To Goring, measurements were inviolate—not to be juggled with, modified or discarded because they did not substantiate a popular theory. Better proof of this could not be found than the fact that the raw data for his book were set up before the calculations were well under way. Goring as a thoroughgoing biometrician believed that in many fields of research valid conclusions must rest upon the mathematical analysis of large masses of data. But in his research each constant was critically weighed against his own broad and intimate personal experience of the individual instances which constitute the mass.

I find it difficult to decide just what characteristic of Goring impressed me most when we were working together at the Biometric Laboratory ten years ago. Sometimes it was the steadfast scientific purpose which had supported the years of painstaking detail upon which his great book rests—detail scrupulously executed notwithstanding the fact that there was at times little prospect of its ever serving as a basis for constants and generalizations. Sometimes it was the breadth of interests, knowledge and sympathies of one whose work

Prison, Manchester. Those who desire may find a portrait and a more adequate appreciation in *Biometrika*, Vol. XII., pp. 297–307, pl. 1, 1919.

² Goring, C. B., "The English Convict; A Statistical Study." 444 pp. London, 1913. Abridged edition, Wyman and Co., 1915. The statistical work on this volume was carried out at the Biometric Laboratory with the cooperation of H. E. Soper and with the helpful suggestion and criticism of Professor Pearson.

lay in a field seemingly so circumscribed. Sometimes it was the entire freedom from both callousness and sentimentality of a man who had spent a decade, more or less, with the inmates of the British prisons.

One sentence tells much of the man. One day I asked, "Why is this to be *The English Convict* instead of *The English Criminal*?" He replied instantly, "Perhaps some of them are not criminals, only convicts."

J. ARTHUR HARRIS

SCIENTIFIC EVENTS

THE DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH OF GREAT BRITAIN

THE following is a list of research associations which have been approved by the department as complying with the conditions laid down in the government scheme for the encouragement of industrial research and have received licenses from the Board of Trade under Section 20 of the Companies' (Consolidated) Act of 1908:

British Boot, Shoe and Allied Trades Research Association,
Technical School, Abington Square, Northampton.

Secretary—Mr. John Blakeman, M.A., M.Sc.
British Cotton Industry Research Association,
108, Deansgate, Manchester.

Secretary—Miss B. Thomas.
British Empire Sugar Research Association,
Evelyn House, 62, Oxford Street, London, W.1.
Secretary—Mr. W. H. Giffard.

British Iron Manufacturers Research Association,
Atlantic Chambers, Brazennose Street, Manchester.

Secretary—Mr. H. S. Knowles.
British Motor and Allied Manufacturers Research Association,
39, St. James's Street, London, S.W.1.

Secretary—Mr. Horace Wyatt.
British Photographic Research Association,
Sicilian House, Southampton Row, London, W.C.1.

Secretary—Mr. Arthur C. Brookes.
British Portland Cement Research Association,
6, Lloyd's Avenue, London, E.C.3.
Secretary—Mr. S. G. S. Panisset, A.C.G.I., F.C.S.

British Research Association for the Woollen and
Worsted Industries,

Bond Place Chambers, Leeds.

Secretary—Mr. Arnold Frobisher, B.Sc.

British Scientific Instrument Research Association,
26, Russell Square, W.C.1.

Secretary—Mr. J. W. Williamson, B.Sc.

British Rubber and Tyre Manufacturers Research
Association,

c/o Messrs. W. B. Peat & Co., 11, Ironmonger
Lane, E.C.2.

The Linen Industry Research Association,
3, Bedford Street, Belfast.

Secretary—Miss M. K. E. Allen.

Glass Research Association,

7, Seamore Place, W.1.

Secretary—Mr. E. Quine, B.Sc.

British Cocoa, Chocolate, Sugar Confectionery, and
Jam Trades Research Association,

9, Queen Street Place, E.C.4.

Secretary—Mr. R. M. Leonard.

Schemes for the establishment of Research
Associations in the following industries have
reached an advanced state of development.

RESEARCH ASSOCIATIONS APPROVED BY THE DE-
PARTMENT BUT NOT YET LICENSED BY THE

BOARD OF TRADE

British Music Industries Research Associa-
tion.

British Refractory Materials Research Asso-
ciation.

British Non-Ferrous Metals Research Asso-
ciation.

Scottish Shale Oil Research Association.

PROPOSED RESEARCH ASSOCIATIONS WHOSE MEMO-
RANDUM AND ARTICLES OF ASSOCIATION ARE

UNDER CONSIDERATION

British Launderers Research Association.

British Electrical and Allied Industries Re-
search Association.

British Aircraft Research Association.

INDUSTRIES ORGANIZATIONS ENGAGED IN PREPARING
MEMORANDUM AND ARTICLES OF ASSOCIATION

Silk Manufacturers.

Leather Trades.

Master Bakers and Confectioners.

In addition to the industries included above,
certain others are engaged in the preliminary

consideration for forming Research Associa-
tions.

NATURAL GAS CONFERENCE

SECRETARY LANE, of the Department of the
Interior, announces that the following ap-
pointments have been made for the committee
of ten authorized by the resolution at the
Natural Gas Conference, held under Secre-
tary Lane's invitation at Washington, Jan-
uary 15, 1920: Van H. Manning, director,
Bureau of Mines, chairman; John B. Corrin,
The Reserve Gas Company, Pittsburgh, Penn-
sylvania; L. B. Denning, The Ohio Fuel
Company, Pittsburgh, Pennsylvania; J. C.
McDowell, Wichita Natural Gas Company,
Pittsburgh, Pennsylvania; W. L. McCloy,
The Philadelphia Company, Pittsburgh, Penn-
sylvania; John S. Rilling, Public Service Com-
mission of Pennsylvania, Harrisburg, Penn-
sylvania; Miss Edna N. White, American
Home Economics Association, Detroit, Mich-
igan; Art L. Walker, Chairman, Corporation
Committee, Oklahoma City Oklahoma; F. W.
Wozencraft, Mayor, Dallas, Texas; Samuel S.
Wyer, Consulting National Gas Engineer,
Columbus, Ohio; and Dr. I. C. White, state
geologist of West Virginia, Morgantown,
West Virginia.

The functions of this committee will be to
consider the wastes now going on in natural
gas and the relations between the natural gas
companies and the consuming public. The
committee has been carefully selected from a
number of nominations with a view to repre-
senting equally the interests of the public
and the natural gas companies. Dr. Manning
writes:

The development and utilization of the most
ideal fuel known to man—natural gas—has been
accompanied by almost inconceivable wastes. Al-
though these wastes have been greatly reduced dur-
ing recent years, they have by no means been elim-
inated and the country to-day is paying the penalty
of its sins by the depletion and even exhaustion
of many of the formerly prolific gas supplies.
These wastes have occurred in the fields where the
gas is produced; in the lines through which the
gas is transported; and from the cooking stoves,
furnaces, boiler plants, etc., where the gas is ulti-
mately consumed.