garages until the ethyl petrol has been reduced to half its volume, but later, as it evaporates, it will be found in increasing quantities. The extent of the concentration of lead found in the air depends on many factors, but, in practice, the four following have importance: (1) the nature of the petrol with which the ethyl fluid has been mixed, (2) the quantity of ethyl petrol spilled and the frequency of spillage, (3) the surface on which the ethyl petrol is spilled, and (4) the ventilation of the garage.

To determine the magnitude of the concentrations of lead tetra-ethyl likely to be found, in practice in the air of garages when ethyl petrol is spilled, conditions were chosen to represent the spillage of a single large quantity and the repeated spillage of small quantities of ethyl petrol in closed and open garages having floors made of four different materials, namely, asphalt, concrete, wood, and glazed tiles or bricks. It was found that the concentration of lead tetra-ethyl in the air was greatest when evaporation took place from a glazed surface and was least from asphalt. Both concrete and asphalt retained lead tetra-ethyl within their surfaces, thereby reducing proportionately the concentration of lead tetra-ethyl in the air. Increasing ventilation reduced both the concentration of lead tetra-ethyl in the air and the time during which lead tetra-ethyl was found in the air. If a large quantity of ethyl petrol is spilled in an unventilated garage, significant proportions of lead tetra-ethyl will be found in the air of the garage, but as the maximum proportion of lead tetra-ethyl found experimentally in the air under very severe conditions of spillage and ventilation was far below the concentration of lead tetra-ethyl stated by Eldridge (United States Public

Health Bulletin No. 158, 1925, p. 31) to be lethal for mice, the risk of danger to health appears to be small. In an adequately ventilated garage, since the concentrations of lead tetra-ethyl likely to be found in the air even when large quantities of ethyl petrol are spilled are less than that stated by the American investigators to have no effects on the weight, growth, or life of animals breathing it for three hours daily for several months, the risk of injury to health appears to be negligible.

By far the greater risk, and one to which the Committee refers with emphasis, is that of carbon monoxide evolved in a badly ventilated garage.

That the results of the work carried out by the Committee's experimental staff agree with those obtained by investigators in the United States of America is noteworthy, because the methods adopted in the two investigations were often dissimilar in principle. From a consideration of all the investigations, whether carried out in America or in Great Britain, and of the evidence given by witnesses, the Committee concludes that the use of ethyl petrol of the present composition as a fuel for motor-cars will not constitute a risk to the health of the general public or to that part of the population which is most exposed thereto, namely, garage workers, police officers on traffic control duty, and drivers of motor and other vehicles.

Finally, the Committee does not consider that there are any reasons for prohibiting the use of ethyl petrol in Great Britain, but recommends certain precautions, such as labelling of the cans containing it, with a warning to avoid spillage and use other than as motor fuel, dyeing the liquid, and retention of a concentration of lead tetra-ethyl not above its present limit.

Landscape at the Royal Academy.

By Dr. VAUGHAN CORNISH.

ONCE again, but unhappily for the last time, we see on the walls of the Royal Academy that rendering of chequered shade by which the late Mr. H. H. La Thangue, R.A., revealed the joyousness of sunlight, especially in Mediterranean lands, as in the picture "Packing Grapes" (120).

Outstanding among the studies of mountain scenery is "Cathedral Mountain from Lake O'Hara" (44), by Mr. Richard Jack, R.A. Cliffs set with pine trees rise from still, dark waters; snow slopes, above, coldly grey, reach to the foot of the towering crag from which the mountain takes its name. The deep shadowing of cyclopean rocks harmonises with the sombre pines below. The companion picture, "Lake O'Hara, Canadian Rockies" (243), in another room is carried out in the same manner, a fine interpretation of the solemnity of mountains and "the strength of the hills". "A Glen of Arran" (81), by Mr. Guy Kortright, an assembly of mountain peaks strongly coloured in the full light of day, but stripped of atmosphere, is extraordinarily suggestive of silent solitude, so that the artist has been successful in his use of an extremely trying convention. Mr. Sydney Lee, R.A., has a painting of "Sunset in

the Mountains" (401), which shows huge turreted forms silhouetted in shades of deep purple against a glowing sky; one of the most deeply emotional aspects of the high mountains.

Among the studies of the sea we come first to that of "Silver Moonlight: St. Ives Bay" (60), by Mr. Julius Olsson, R.A., in which a succession of long, low rollers sweep in silver foam over the shallows of a curving shore. The lights of the fishing fleet, dimly discerned on the dark waters beyond, bring the human touch without impairing the elemental character of the scene, for the long-shoreman is, in his occupation, still the primitive man whose work and sport are one. In "Fresh Morning off the Scillies" (161), by the same painter, a study apparently made from a sailing boat, the waves, rising as high as the point of sight, produce the effect of size and power which is lost when they are overlooked from a lofty deck. Thus seen, it is the sea which is the more massive element, the distant land, dimmed by the salt spray, appearing unsubstantial. Mr. Norman Wilkinson also pushes off in a boat, and thus gets full value from the waves in the only possible manner. "A Newfoundland Fisherman" (359)

by him is a study of a companion boat, with hull rising above the line of sight, the wonderful curves of wind-filled sails cutting across a rain-washed sky, the tumbling sea dark under the squall-cloud hanging overhead. Such pictures recall the adventure and the beauty which attend the sport of sailing, an occupation which, moreover, permits us to explore the scenery of our coasts and estuaries, which can never be fully appreciated from the landward side alone.

In "The Spey, Fochabers" (103), Mr. S. J. Lamorna Birch shows great skill and knowledge in the treatment of the waters of a river which, within a short compass, has many varieties of motion.

We cannot but deplore the scarcity of landscapes in which animal life is the focus of interest; but in Mr. Arthur Wardle's "Under the African Moon" (164) we have at any rate one fine example. The scene is the rocky desert, that stern landscape where man cannot live but has often gone to pray. Seen in the monochromatic moonlight, the lion and lioness watching from the edge of the escarpment are one in tone and colour with the background, the only contrast that of their rounded, supple forms against the rugged outlines of the rock. If we had an unbiased appreciation of the beauty of living form, should we not give more attention to that of the great felines and relatively less to that of man? Granted that a man's hand is a much finer structure than the paw of a beast, yet when we examine the limbs we find a balance and rhythm in those of the lion and leopard of which biped man cannot boast.

A word in conclusion on certain pictures which illustrate matters relating to that heritage of English scenery, the preservation of which, as was aptly stated in the *Times* of Friday, May 2, is becoming the subject of "a great national debate".

"Midsummer Evening in Somerset" (279), by Mr. Charles S. Cheston, shows one of those splendid prospects of well-wooded lowland which are seen from hills of no great height in southern England. No native of a mountainous country looking up at these insignificant elevations would suppose it possible that they could provide such extensive views. In Somerset itself we have a notable example in the low ridge of the Polden Hills, where a view-point of special interest has fortunately been secured and vested in the hands of the National Trust. In "Blakeney from Cley" (766) Mr. A. Raine-Barker has sympathetically rendered in smooth water colour a landscape of interest in relation to an important Nature reserve, which derives an old-world charm from the great towers of the two village churches. "Moel Siabod" (1257), a small aquatint by Miss Eveleen Buckton, gives a good impression of the wild scenery in that part of the ancient Snowdonia which, it is hoped, will soon be scheduled as a National Park.

Mr. Harry van der Weyden's large canvas, "From Ballard Down" (420), shows the beautiful waste of Studland Heath and a very interesting outline of coast and estuary in the mellow sunshine of late afternoon. Access to this delightful bit of wild country has been lately made easy for the large resident and visiting population of Poole and Bournemouth, and this is for the moment a beneficial event. The beauty of the broad, open expanse is, however, of a particularly vulnerable character, and its charm will vanish if it be built upon. By all means let the many come and enjoy the heath, but let us hope that the corporations of Poole and Bournemouth will realise that, as Beachy Head stands to Eastbourne, so does an unspoilt Purbeck stand to their towns, an extra-mural asset of financial as well as sentimental value.

Obituary.

PROF. GEORGE A. GIBSON.

PROF. GEORGE ALEXANDER GIBSON, whose death at Scotstounhill, Glasgow, on April 1, we greatly regret to record, was born at Greenlaw, Berwickshire, on April 19, 1858. His father, the late Mr. Robert Gibson, was highly respected throughout the Greenlaw district as a leader in ecclesiastical and political affairs.

Prof. Gibson was educated at the local Free Church school, from which he proceeded straight to the University of Glasgow, where he won high distinction in classics, English literature, and philosophy, as well as in mathematics. In 1882 he gained the Euing fellowship in mathematics and natural philosophy, and in the following year he was appointed assistant to Prof. William Jack, who then held the chair of mathematics. During the succeeding twelve years he established his reputation as an enthusiastic and capable teacher, and was responsible for the initiation and conduct of numerous courses on advanced mathematics, which were of great service to the honours students.

In 1895, Prof. Gibson was appointed professor of mathematics in the Glasgow and West of Scotland

Technical College, where he remained until 1909, when he returned to the University of Glasgow as successor to Prof. Jack. During his period at the Technical College notable developments took place in the aims and scope of the work of that institution, and in all these Prof. Gibson took an outstanding share, thus earning the gratitude of his colleagues and of the governors of the College.

On returning to the University, Prof. Gibson took the opportunity to reorganise the mathematical teaching there; tutorial instruction was provided for all the students, and the curriculum was widened and extended. After the War the number of students rose to 900, but in spite of all difficulties the high standard of the work was maintained.

Prof. Gibson was a great teacher who loved his work, and for whom the interests of his students were paramount. He was also an eager and tireless student, with a remarkably wide and thorough knowledge of mathematical literature. He became a recognised authority on certain parts of the history of mathematics, and wrote numerous papers on the origins of the calculus and on the great Scottish mathematicians. He was the author