

ers were the Duke of first and a third; Frank a second, and a fourth; o firsts, a second, and a crewbury, three seconds

ge and middle white l, Edmund Wherry, J. esford, and John Filling-

ALBION.

FARM.

Memorial Hall.

Farmer's Advocate" it are now being accepted the erection of a suitable al Hall on the campus llege, Guelph, Ontario. e Provincial Govern- and the erection of this ar more to be collected idea at first was to erect ore than one hundred s who made the supreme er, however, at the sug- , though not directly vity interested in its riculture generally, the ew Hall will be sacred e from the agricultural ar. It will stand as a y all the agriculturists ell, but will mark more A. C. students and ex- and Flanders. It is to f the great work her ey ever played. It is eds should be suitably

l as planned are shown ill seat eight hundred e students for church e of the student body. meetings in connection herings at the College, e every Ontario farmer iends of the College are e boys who fought and ations to Ontario agri- rformed by the Com- at none who would like mpaign for subscriptions winter and building will e Committee, already a number of prominent e breeders.

friend of the College ave sent \$500, while ge and of Macdonald to \$100 each. Some ore than others, but e appreciated. Dr. io Agricultural College, of the Committee who is also treasurer of the irect to him.

FARMER'S AND DERS.

1 Colleges.

as probably attended hort course held in his en years. In addition many other facilities who wishes to educate rning. Great strides ften or twenty years, as was due to the slow, the early agriculturists at we are now moving An interesting account al education appears ulture in the Atlantic himself a farmer, who tional difficulties in pment of agriculture. rory of Canadian agri- the young men on and the following para- that they should be of the country.

ion among a limited farmers should have t they might be able gently, but that they wn with men of other d colleges began to ns were found attend- , however, that the e very soon lost his afterwards turned his s. The student thus e increased knowledge

and power to think, and work systematically, enabled him to earn a larger income in some other business.

"To meet this difficulty, to give the boy intended for for the farm the mental training that is his right, and at the same time to keep alive in him the love of farm life, the Agricultural College was called into existence. Here it was hoped that the education of mind and muscle would be carried on simultaneously, and any taste inherited or previously acquired for the cultivation of the soil, might be intensified. In a college of this class, too, it was thought that the lad from the country would not be so much exposed, as in the arts colleges, to the influence of students from wealthy homes, whose early surroundings had fostered in them habits foreign to a successful career on the farm. This suggestion of an agricultural college met with the approval of those who were working for the solution of the problem, and after a good many years of struggle and discouragement the idea was taken up and acted upon.

"As early as 1826 an agricultural school was established in Derby, Connecticut. In 1857 and in 1859 Michigan, Maryland and Pennsylvania started agricultural colleges, but the Michigan college alone survived the difficulties these institutions had to meet fifty years ago. It was not until 1862 when a law was passed giving a grant of land for this purpose to each state, that these colleges got a safe footing in the United States. The amount of land actually reserved by each state under the law varied from 24,000 acres in Alabama to 99,000 acres in New York. This land was given for the express purpose of aiding in the advance of agricultural education. In 1865 Massachusetts, New Jersey and New York established colleges under the new law. Massachusetts, however, gave one-third of the income derived from the land to the Massachusetts School of Technology, Wisconsin followed in 1866, West Virginia in 1867, Tennessee in 1869. The Guelph College in Ontario, was opened in 1874. The name decided upon was the Ontario School of Agriculture and Experimental Farm, and the motto suggested was 'Practice with Science.'

"When these colleges were established, it was hoped that, for a nominal sum, farmers' sons and young men intending to farm would get the kind of education necessary to enable them to prosecute their own business with success and incidentally make them the equals in mental development and training of those following other avocations. It was found, however, after several years of experience that comparatively few students came from the homes of the ordinary farmers. It was seen also that the same old tendency, so manifest in the students educated in the arts college, still showed itself in the new colleges. On account of the small number of students and the lack of satisfactory results, it looked for a time as if the Agricultural College was doomed. The comparative failure of these institutions was no doubt largely attributable to the want of the right stamp of men to take charge of them. It was only after long years of experience that teachers were produced who could compel the students to respect the profession and stir their ambition to succeed in it.

"Between the inception and final success of the Agricultural College, the idea of the agricultural experimental station was introduced from Europe. These were established in Canada and in the United States at about the same time. After teachers were developed to man the Agricultural Colleges, the next difficulty was to induce the farmers in any numbers to send their sons there to be trained. The prejudice in the rural districts against 'book farming' was still very marked, and this was augmented by the value of the labor lost to the home farm, while the son was away. The leaders of the movement have sought to overcome this last objection by arranging for short courses, to be given in the winter when the boys are not so much needed at home."

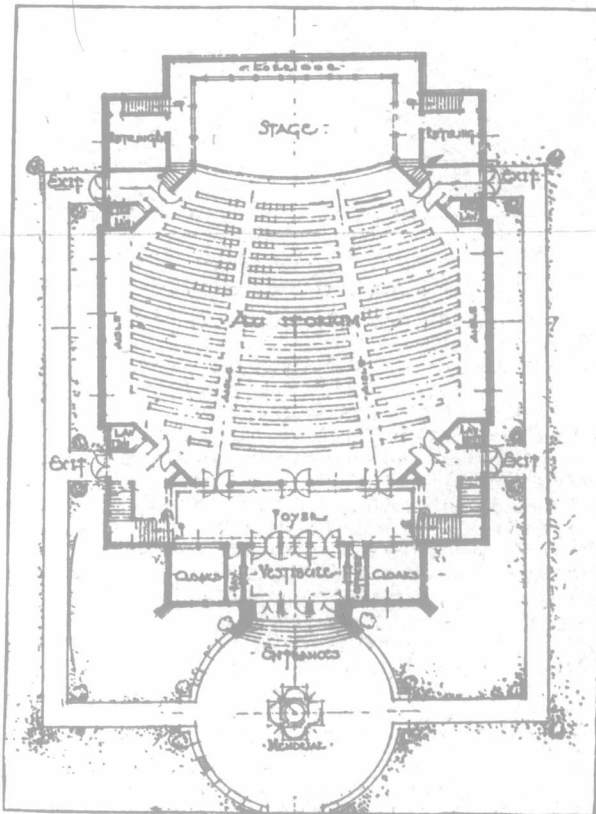
AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.

Exhaust Gas Poisoning Brings Serious Results.

Again last winter the newspapers frequently told of the death or almost fatal results which have followed an attack of gas poisoning by some motorist who has been foolish enough to shut himself up with his car in a closed building and run his engine to tune it up or prepare for a trip in the cold out-of-doors.

Every motorist and garage mechanic should fully appreciate and guard himself against the very serious danger of becoming poisoned by the deadly carbon monoxide gas that often is present in large proportions in the exhaust of automobile motors. Breathing of this gas in considerable quantities, for any but very short periods, is certain to cause severe headaches and, depression, and in extreme cases leads to fainting and even death. The danger of this form of poisoning is particularly great in cold weather, when garage doors and windows are kept shut and engines are tested indoors rather than in the open. In the very small private garage this danger is especially great as the small amount of air present is very quickly polluted. Poisonous carbon monoxide gas is most largely found in the exhausts of engines which are operating with incomplete fuel combustion, that is, with over-rich mixtures and, unfortunately, with present-day fuel, this is the condition of most engines for some time after being started from a cold condition. The only safe procedure for the motorist, who keeps his car in a very small garage, is to open the door wide as soon as the engine is started,

and keep it open as long as the engine is running inside the building. Warming up the engine in a small box-like garage with the door shut is dangerous to any person inside, and even, in the case of a good-sized garage, running the automobile to charge the storage battery or to make long continued tests of the carburetor involves possible danger to health. The physiological effects of gas poisoning are gradual and insidious, and are sometimes not noticed until faintness approaches, when it may be too late for a person who is all alone in



Interior Plan of the New Hall.

a garage to seek purer air. Especial care should be taken never to work under a car when the engine is running, for the atmosphere may be bad, in such a position that one cannot get up easily and reach the open air quickly, in case of faintness. Deaths have occurred under such circumstances. If it becomes necessary to run an engine for considerable periods in a small closed garage, the exhaust should be conducted out of a partly opened window through a steam hose connected to the exhaust pipe.



The New O. A. C. Memorial Hall as Planned.

THE DAIRY.

Paturient Troubles in Cows.—Con.

Inversion of the Uterus—Cow Pox.

Inversion, or, more correctly speaking, "eversion" of the uterus or womb in cows occurs more frequently in cows than in females of other classes of stock. It is due to a relaxation of the uterine ligaments, and, like many other uterine troubles, cannot be accounted for. The condition or surroundings of the animal do not appear to have much effect in either causing or preventing the accident, except in the fact that cows stand up in stalls which are considerably lower behind than in front are more liable to suffer than those in practically level stalls. The inversion may be partial or complete. The symptoms are practically unmistakable. The

patient may be either standing or lying. Straining will be well marked, and a mass of tissue appears through the lips of the vulva. As straining continues the mass becomes greater until the whole organ becomes expelled, and, of course, everted or turned inside out.

If noticed when eversion is incomplete treatment is comparatively simple. The patient, if lying, should be got upon her feet, the mass thoroughly washed with an antiseptic lotion, as two per cent. solution of one of the coal-tar antiseptics in warm water, and then pressed back into its place by careful and sufficiently strong pressure to return it, great care being taken to not force a finger through the walls of the organ. If the afterbirth be adherent, it is well to remove it before returning the organ, provided this can be easily done, but if it be firmly attached it is better to wait a couple of days to allow the neck of the womb to contract sufficiently to prevent re-inversion before severing it. After the womb has been carefully returned it is good practice to put a couple of stitches of soft, strong sutures through the lips of the vulva. For this purpose strong cord or several strands of shoemaker's hemp slightly waxed with beeswax, and disinfected in a five per cent. solution of carbolic acid, or strong silk sutures may be used. A narrow stall should be arranged, with either a false floor or built up with manure or straw or in other ways, so that it will be a foot higher behind than in front, and the cow kept tied in it for two or three days, or until straining ceases. Then the stitches should be removed, and, if the afterbirth be still retained, it should be carefully removed.

When inversion is complete treatment is much more difficult. In mostly all cases the patient is recumbent. If the afterbirth be attached it must be carefully removed, the womb thoroughly washed with a warm antiseptic solution, as a five per cent. solution of one of the coal-tar antiseptics, a rubber or other sheet placed under the womb to keep it out of the dirt, and then it must be carefully returned. In returning it great care should be taken to not tear off any of the cotyledons (the lumps to which the afterbirth is attached) or press the fingers or hand through the walls of the organ. Any attempt to return it while the animal is lying, will, in most cases, result in one or both of these accidents. If she can be got on her feet, the uterus should be suspended by two assistants, one holding each end of the sheet, while the operator, standing behind the cow, will return the womb by commencing on the portion nearest the vulva and working carefully and patiently, endeavoring to hold in with one hand that portion which he has succeeded in returning with the other, and when about two-thirds of the organ has been returned the rest will be easy.

When the patient refuses to rise, she must be suspended or her hind quarters raised. This can best be done by attaching the outside rings of a neck-yoke or whiffletree to the hocks, by means of straps, then hooking the end of a pulley rope or chain into the centre ring and raising her until the hind parts are suspended upon her withers. Another plan is to build the hind part up with straw or timbers, but the pulley is the better when one can be procured. The womb can now be comparatively easily returned, as she has little resistive power. When returned, the above mentioned measures to prevent re-inversion should be attended to, and in addition to these it is good practice to arrange a truss causing pressure upon the vulva, and leave it on for a couple of days. She should be kept in the elevated stall for three or four days, or at least until straining ceases. It is good practice to give her 40 to 60 drops of carbolic acid, in a pint of cold water as a drench, or sprinkled on her food three times daily until all discharge ceases.

Cow Pox.

Cow pox is a form of vaccinia peculiar to cattle. It affects the teats and udders, is contagious and readily spread in a milking herd by direct contact, or by the hands of the milker

carrying the virus from an affected to a healthy cow. In many cases its appearance in a herd cannot be accounted for. The symptoms are readily recognized, and, in mostly all cases, are strictly local, seldom causing constitutional disturbance. Outbreaks which are apparently spontaneous, occur among cows, especially when confined in close sheds, and shortly after calving. While we say the outbreaks are "apparently spontaneous" we believe that this is impossible, but it is also often impossible to explain how the virus was introduced into the herd, but the virus must be introduced in some way else the disease could not appear, as no infectious virus is capable of spontaneous development.

The first symptoms of the disease is a redness of portions of the teats and udder, at first somewhat diffused, but soon becoming localized in patches, accompanied by some pain and swelling. Small, hard nodules appear and increase in size until they attain about the size of a ten-cent piece. This is called the