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LE COEUR BRITANNIQUE.

— " Rodrigue, as-tu du cœur?"... — On n'est pas surpris que cette apostrophe ne se rencontre point dans le théâtre anglais, tant la réponse est certaine. Chaque fois que leur gouvernement a fourni la preuve de ses courtes vues, c'est par un long courage que les Anglais y remédient : depuis deux ans, le spectateur impartial ne se lasse pas d'admirer le spectacle de cette constance !

Sans doute les organes de la presse sont-ils trop réservés sur ce sujet. Outre qu'ils sont tenus en lisière par des fils d'acier que le lecteur n'aperçoit point, on croit discerner un certain endurcissement professionnel chez leurs rédacteurs, appelés à examiner les événements d'une manière objective ou condamnés le plus souvent à n'être que le truchement des agences télégraphiques. Toutefois, il ne faudrait pas gratter bien fort l'enduit de leur apparente indifférence pour trouver sous cette carapace tout autre chose, tant le courage physique a conservé son prestige aux yeux des hommes.

Mais il en est un autre qui, pour être moins visible, n'en a peut-être que plus de grandeur ; c'est le courage moral. Charles Péguy a écrit que pour une nation il y a une chose plus redoutable que l'invasion militaire, c'est l'invasion de la vie intérieure ; c'est par le relâchement de la fibre intellectuelle que commence toujours la décadence d'un grand peuple. Pour celui de la Grande-Bretagne, l'affaiblissement de la fibre spirituelle serait plus grave encore, et la ténacité qu'il met à préserver la vitalité de son âme est la preuve éclatante de sa réalité.

Aussi durant leur longue épreuve, la constance des habitants des villes anglaises ne s'est point démentie : elle a été nourrie par leurs pasteurs. L'un d'eux qui a fait de l'évangélisation dans les abris se loue fort des auditoires qu'il a rencontrés sous terre. Jamais, il n'a, dit-il, entendu personne se plaindre ni vu flancher la bonne humeur. Le même écho était parvenu aux Vaudois par la voix d'un de leurs compatriotes qui est pasteur de l'Eglise française de Londres. Il signale aussi que l'idéalisme britannique ne perd jamais la notion du " matter of fact " et que dans cette période de difficultés matérielles les œuvres religieuses ont vu s'accroître leurs ressources.

Dans cette attitude que les notions spirituelles viennent étayer, qui donc refuserait de reconnaître la force d'un grand peuple? Nous en avons trouvé le symbole dans une photographie qui représente le Parlement à Londres, au lendemain d'un raid aérien. Une bombe a creusé son entonnoir à côté de la statue de Richard-Cœur de Lion. Le héros est demeuré en selle, son épée toujours tendue. Vous croyez qu'elle s'est brisée sous le choc? Non point : elle s'est pliée !

Certains de nos lecteurs qui ont visité l'Abbaye de Westminster se rappellent peut-être une inscription qu'on lit sur le monument d'un poète du XVIIIe siècle Thomas Gay :

Life is a jest and all things show it :
I thought so once, but now I know it.

J'ignore si cette philosophie est un des fondements du courage des jeunes Anglais ; mais qu'ils considèrent ou non leur vie comme un jeu, ils savent qu'ils ne perdront jamais qu'une manche de la longue partie dont l'enjeu est l'honneur du pays. Tous sont prêts à se sacrifier pour ramener dans le monde les jours de la paix et de la tolérance. N'est-ce pas d'ailleurs un autre de leurs poètes, Robert Southey, qui a écrit : *And those who suffer bravely save mankind*?

A voir depuis deux ans le comportemen de ce peuple, j'imagine que notre héros national, dont on a tant parlé aux Suisses lors de leur sixième centenaire et qui refusait de saluer un certain chapeau, enlèverait le sien devant les habitants des Ils britanniques.

" Gazette de Lausanne" (R. de Cérenville.)

FUEL GENERATORS IN SWITZERLAND.

(*" The Autocar," January 30th,* 1942.)

Owing to the war Swiss motoring conditions are very difficult to-day, since petrol imports have been drastically reduced. Therefore, means and ways of using home fuels have been developed during the last year or so, and various types of generators have been evolved. A show, recently held at Zurich, offered an opportunity to review efforts in the direction of alternative fuel generators. Generally speaking, generators in various forms seem to have left the experimental stage, and it is interesting that one-tenth of the motor vehicles in circulation in Switzerland during peacetime have now been equipped with a generator.

For car purposes three systems of driving without petrol were offered, the charcoal gas generator, the acetylene generator, and electricity. Since calcium carbide is available in Switzerland in reduced quantities, acetylene gas generators have been developed extensively. Seven different models were on view. The neatest system is that evolved by General Motors Suisse, the G.M. Carbor. Externally, only a cylindrical container, mounted across the front end, is visible.

A holder within this container, divided into four compartments, holds about 60lb. of calcium carbide, which is equal to from four to five gallons of petrol. Solenoid valves allow water in small quantities to be led to each compartment consecutively. Water is carried in the petrol tank, and is fed to the generator by the petrol pump.

A simple control for changing over from one compartment to the next is mounted on the facia board. It consists of a pressure valve, indicating the gas pressure in the container actually in use, control lamps, which indicate when the carbide is nearly down, and a press button, which brings the next container into use.

When great range of action is needed, a similar generator can be mounted at the rear. Water is shut

off from the generator as soon as the ignition is switched on by coupling the solenoids with the ignition circuit, and no gas pressure, is, therefore, liable to be created. The carburettor is used for adding alcohol to the gas, since knocking is otherwise inevitable. Performance compares very well with that attained on petrol, acceleration is practically identical, and maximum speed is only about 10 per cent. less. Since starting is instantaneous, many vehicles used in towns have been equipped with this generator.

Other systems use baskets containing carbide, which are lowered into the water container before starting the engine, the MB generator, which works on this principle, consists of a shallow luggage container which can be mounted at the rear end. A special valve prevents any pressure being developed within this system, which adds to safety.

Another system, the Excelsior, is more conspicuous as to external form, since the acetylene is generated in a cylindrical, vertically mounted container. Generators such as these are, however, covered in leather.

The Eris generator, mounted on a Flying Standard Eight, consists of two horizontally mounted cylinders one foot in diameter and three feet in length. Within the upper cylinder a conical container holds the calcium carbide. On the lower and narrow end of this container a regulator allows small particles of carbide to fall into the lower cylinder, which is filled with water. The regulator is driven by flexible cable from the dynamo, and the actual quantity of gas developed varies with engine speed. This gives a high degree of flexibility. Before starting, a hand-controlled valve allows some gas to be generated before the engine actually runs. This generator system can easily be stowed away within the luggage container.

The Buss generator is more elaborate, and probably the most developed acetylene generator on the market. Its price, however, is higher than that of most of its competitors. The Buss employs a revolving drum for carrying the carbide. The drum is driven by a flexible cable from the engine. Water is pumped from the " petrol " tank by an electric motor to the top of the drum and led, in drops, to the calcium. Only dry calcium dust is the residue with this system, whereas with all others wet calcium is left. This system lends itself for use with big cars having large luggage containers.

The Kaga generator has two vertical containers connected by a small tube at the lower end, and leaves the rear end of the car free for luggage space. One cylinder carries carbide at its upper end, and water is carried in both cylinders at an equal level. Gas is stored in the second cylinder.

Generally speaking, the charcoal gas generators are more cumbersome than the acetylene producers, but in many instances the appearance of these has been improved, and a number of generators do not detract very much from the good lines of the cars. Charcoal gas generators are now a practical proposition even for cars. Although not particularly suited for dense traffic conditions, they give very good results for medium and long-distance runs. Range of action has, in certain instances, been increased up to 200 miles, and performance is now said to be quite comparable with that obtained from petrol.

It may be said, however, that only cars with a favourable power-to-weight ratio were exhibited with charcoal gas generators at Zurich. Externally, attempts to secure aerodynamic lines are in evidence. The Ramex generator, for instance, has well-curved lines and can be built to blend with the back of vehicles having a sloping rear panel. The Ramex system has particularly neat filter units mounted at the side of the actual burner; it can be dismantled with one hand and very easily cleaned.

Many generators are developed as trailers and, therefore, permit the car to be used on petrol without great modification. Filter and burner units are not always carried at one end; the Autark generator, for instance, has a filter unit container in a cylinder, mounted across the front end. In some instances generator and filter units are divided at the rear and carried within two symmetrically mounted cylinders. The Riwa generator is arranged on this plan, and rear vision is unimpaired and the luggage compartment free.

In connection with these new fuel generators some auxiliary units have been developed. Foremost is the new Expandüse exhaust silencer made by Jaray, a pioneer in car aerodynamics. Although primarily intended for use with charcoal or acetylene gas engines, the advantages claimed for this invention make it an interesting possibility for all types of engines. It is a combination of a diffuser, an ejector and a valve. It is built to eliminate all power losses caused by back pressure in exhaust systems.

Another interesting device is the Surcarburex, for use in engines where the high compression ratio necessary for charcoal gas does not allow petrol to be used at any time. In this instance, a valve mounted on the carburettor enables a certain amount of exhaust gas to be reintroduced into the combustion chamber, thus reducing the actual combustion pressure.

Vehicles driven by electricity did not show any new trends. Actual range of action varies between 30 and 50 miles and speed does not go higher than about 25 m.p.h. Generally, motors of 10 to 20 h.p. are used, but they cannot provide sufficient power in hilly country. For town purposes, however, the Fiat 500, equipped with Imag electrical units, appears to be satisfactory. Gear boxes are retained even with electric motors, and starting is effected on first speed exactly as with petrol engines.

The progress made within one year augurs well for the future of alternative fuel generators in Switzerland.

SWISS STOCK EXCHANGE PRICES.

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	15th Jan.	18th Feb.
Bankverein	487	502
Kreditanstalt	553	558
Rückversicherung	3050	3250
Ciba	6275	6400
Nestlé	862	840
Aluminium Neuhausen ...	3275	3335
Columbus	341	336
Sulzer	1275	1310
Brown Boveri	710	736
Wehranleihe 3% 1936 ...	102.30	102.20
SBB Jura-Simplon ...	102.75	102.85
Hispano A, B, C.	(2/2/42) 1085	