

U.S. methods were not overlooked. Yet, good as our present system is, we are a long, long way from U.S. where departments have their own graduation schools with degrees in the subjects taught, and where almost every-one studies for something, public offices after hours being used for this purpose. Incidentally, a high percentage of U.S. civil servants are University men.

More enviable are the working conditions—"Accommodation is invariably of an extremely high standard and the general cleanliness, equipment and lighting are excellent." Huge windows, natural lighting so advanced that it was less strain than natural lighting (compare with our fatch-house standards, actually lower than the meagre Ministry of Works standards of lighting), air-conditioning and ice-water stands . . . Koka-cola on sale . . . canteen meals for all, tastefully served . . . Wake me up, someone.

None the less, Mr. Simpson concludes: "I honestly believe that as an instrument of government our Civil Service is more effective than theirs." Maybe.

(Mr. Simpson's lecture, reproduced from "Taxes," is given in full in the February "Whitley Bulletin.")

REQUEST TO READERS

In this issue we publish an article on the American Civil Service. In a later number we intend to publish similar articles about other countries, with special reference to the Customs. Those who have been to America for official reasons might well supplement this month's article; a couple of them have already been invited to. Others, from holiday experience and war-time knowledge, could help as regards other countries. Such information is not only useful for the conduct of our own association affairs in giving us either targets to aim for or pitfalls to avoid, but could be a modest contribution to better international understanding. It would be pleasant, too, to see some new writers in these pages. The Editor, I am sure, would particularly welcome items from small-port officers and those working at air-dromes. One need not be an expert, nor a brilliant writer, nor over-serious, lengthy and profound. Articles

and stories of any size on baggage work, shipping stores, unusual seizures, life at the training centre, queer people met, unusual ships and cargoes. Old and young, have you any new ideas on office accommodation, more leisure, further education, training, promotion, uniform?

PUBLICITY OFFICER.

THE GREEN BOOK ERRATA

By the time that this reaches the columns of the "Customs Journal," many members of the staff will have a copy of our 1947 Green Book in their possession, and before the end of July many more members will have received their copies, and it is to those members that I wish to tender my apologies, as the Secretary of the Green book sub-committee, for two important corrections that will have to be made in the Ready Reckoner section of the book. Amendment slips, in this particular instance, will be issued to all purchasers of the book, but I wish to use this medium in the interim to draw readers' attention to the corrections required. On page 214 of the Green Book the column headed 66 $\frac{2}{3}$ % Purchase Tax must be deleted as it is incorrect, and on page 216 under the heading of 20% Ad Valorem duty the purchase tax for 33 $\frac{1}{3}$ % and 66 $\frac{2}{3}$ % against the value of £3 10s. 0d. must be amended to read £1 1s. 0d. and £2 2s. 0d. respectively.

Copies of the book issued after July will contain the necessary slips for insertion.

L. BATTERSBY,
Secretary, Green Book
Sub-Committee.

P.S.A.

Library and Museum.

The Editor acknowledges with thanks the following additions to the above:—
Mam's Year Books for 1886, 1888, 1895, 1897, 1901 and 1911.

Waterguard Christmas Card "Greetings from the Tyne." Designed by Mr. W. S. Kirby, P.O., Stockton-on-Tees, 1912. The card displays three of our launches of the period.

Presented by Mr. R. Hughes, P.O., Liverpool.

SPIRITS (3)

By H.E.P.B.

ETHYL-ALCOHOL

Ethyl Alcohol has always been known as intoxicating liquor and is of very ancient origin. As a beverage it is the alcohol which occurs in beer, wine, cider, and all other spirituous liquors. Its other uses are:—the preparation of perfumed spirits; for industrial and medicinal purposes; and, in the form of methylated spirits, for lighting and heating.

Authorities on the subject seem to have little doubt that as remote as 2000 B.C., spirits were made in China, India, Egypt, and the Far East. At the time of the first English invasion of Ireland (1170-1172) it was discovered that the Irish people were acquainted with the method of deriving whisky from grain. In England, as far as can be ascertained, the first organised distilleries appeared in the reign of Henry VIII; and, in Scotland, although the history of the distillery industry is somewhat obscure, it is thought that the art of distilling spirits was known there as early as the twelfth century.

Pure ethyl alcohol is a colourless liquid with a pungent taste, with practically no smell, and of an inflammable nature, burning with a pale bluish flame free from smoke. It is miscible with water in all proportions and, when so mixed, a contraction of volume takes place accompanied by a rise in temperature (see "Proof Spirit" for the experiments carried out by Joseph Drinkwater, Collector of Excise, London).

This alcohol is produced by the fermentation of sugar. The sugar may be natural sugar, i.e., sucrose found in sugar cane, cane molasses, sugar beet, grapes or various other fruits. Alternatively, the sugar may be produced by the saccharification of the starch in cereals (such as barley, rye, wheat and oats) in the process of malting and mashing to produce "wort".

Fermentation is the action of yeast upon wort or a sugar solution when the saccharine matter is converted into alcohol. This is termed "wash," or, in the case of fermented fruit juices, it would be called wine."

It now becomes necessary to separate the alcohol from the other constituents of the wash. This is done by distillation, the principle of which relies on the lower boiling temperature of alcohol as compared to that of water. The apparatus used for this operation is known as a "still" of which there are a number of varieties, the simplest being the "pot-still." The component liquid (wash) is heated in a boiling vessel until the vaporizing temperature of alcohol is reached, when the vapour is led through a condensing device (a coiled pipe surrounded by cold water) and the resulting liquid alcohol collected in the receiver. The process, however, is a delicate one and it is difficult to obviate the vaporizing alcohol carrying over particles of water in the form of steam and certain other impurities. This first distillate is called "low wines" or "singlings" and it is considered of very poor quality. The operation is repeated in another still and, in the case of some of the best Irish whiskies even a third time.

Whisky prepared in Scotland, in the majority of pot-still distilleries, is made from malted barley. In the preparation of the malt, the curing (or drying) is done with a peat, or mixed peat and coke, fire, and it is to this fact that the smoky flavour of most Scotch pot-still whisky is attributed.

The raw material usually employed in the manufacture of Irish whisky differs from that in the making of Scotch whisky. Most Irish distilleries use 25 to 30 per cent. of malted barley and 75 or 70 per cent. of a mixed grist of raw (i.e., unmalted) rye, wheat, barley and oats. The pot-still used is capable of producing a higher rectification in a single operation than that of the Scotch pot-still.

The finer Brandies, such as those of Cognac (e.g., Martells) are made from the grape. It is a peculiar fact that, although the wines of the Charente vineyards are of a light colour with no distinguished "bouquet," they provide a spirit of fine and delicate character. On the other hand the fuller and more aromatic wines of Burgundy and the Gironde are not so suitable for the manufacture of brandy.

Rum is manufactured from the various products of the sugar cane and, for Customs purposes, the name is re-

stricted to rum produced in countries where the sugar cane is grown, e.g., West Indies, British and Dutch Guiana, Mauritius, Brazil, Natal, etc. The main imports into this country are from Jamaica and Demerara.

Imitation Rum, therefore, is rum other than that described in the previous paragraph. It is made in several countries and its preparation varies both in the materials employed and the means used to obtain the rum flavour and colour. For example, in France sugar beet molasses is the raw material and burnt sugar the colouring matter; in Germany and some other Continental countries this rum is alcohol produced from grain, beet or potatoes in a patent still and flavoured with ethyl butyrate (which gives the distinct and peculiar flavour to rum), essences and colouring matter.

Geneva is a Dutch spirit chiefly manufactured in Schiedam, Rotterdam and Weesoppe from malted barley, rye and maize. The wash after standing for two or three days is distilled in a pot-still into low wines. Juniper berries (from which it derives its name—*genevre* meaning a juniper; and which supplies the well-known diuretic properties), a little salt and sometimes hops and sweet fennel are added. It is then slowly redistilled and the distillate run off into underground cisterns lined with white tiles where the spirits can be kept without colouring.

It has always been believed, and today it is confirmed by the experts, that potable spirits (with the exception of pure alcohol) are greatly improved by age. The exact nature of the changes that take place are not fully known, but it is thought to be due chiefly to the effect of the character and quantities of the other constituents; and to the satisfactory ventilation of the containing vessel. The latter fact appears to have some foundation in that whereas spirits in bottle undergo little change, those preserved in cask alter considerably in taste and chemical composition. It has also been discovered that the type of cask affects the maturation. Whisky, for instance, matures more quickly in a sherry cask than in a plain one.

By the Immature Spirits (Restriction) Act, 1915, certain potable spirits may not be delivered for home consumption

unless they have been warehoused for at least three years (see C.C. 1-4-30 and C.C. 2-10-62).

Industrial Alcohol is spirit used for other than potable purposes, i.e., for the industries, the arts, and for domestic purposes. Large quantities are required to-day for the manufacture of varnish, fine chemicals and dye-stuffs, and for pharmaceutical employment.

The original attempt to make spirits available for industrial use was first made in 1855, in the form of methylated spirits; and the word "methylate" is defined by the Spirit Act, 1880, Section 3, as "the mixing of spirits with some substance in such a manner as to render the mixture unfit for use as a beverage." This was done by the use of a denaturant, originally wood naphtha (crude methyl alcohol) and this is still the main denaturant in all kinds of methylated spirits down to the present time. It was found, however, that in the manufacture of certain articles the denaturant, wood naphtha, was harmful and the law was extended to meet the requirements of the different industries by the Finance Act, 1902, Section 8. Provision was made therein for the supply of ethyl alcohol free of duty when used for industrial purposes but the receiver may be, and usually is, required to denature the spirits in some way before using them.

Industrial alcohol is generally made from sugar beet, beet or cane molasses, potatoes, maize, rice or other starchy materials of a high class as the object of the distiller is to produce as high a yield of alcohol as possible.

Distillation alone will not provide absolute (anhydrous) alcohol. The strongest distilled spirit about 68 over-proof, contains approximately 4 per cent. of water and a further operation is necessary before alcohol "commercially" free from water (i.e., less than 1 per cent.) is obtained. The method adopted was, and still is to some extent, to digest strong spirit with one quarter of its weight of quicklime for some days, and then slowly distil off the alcohol. Other materials having an affinity for water have also been used but the modern method of redistillation with a hydrocarbon such as benzene is rapidly overtaking these processes.

A GOOD NAME

The value of a good name is not disputed, though some will quote Shakespeare on the rose. In America undertakers call themselves morticians and in England rat-catchers wish to be known as rodent destroyers. The possessor of a funny name is thought funny when he wants to change it, and so the man who changed from Baggs to Norfolk Howard must tolerate the wag who then calls boys Norfolk Howards. But was Richard Stinks wiser when he changed his name to Peter Stinks? All these are matters for idle talk and conjecture, as was the name Achilles bore when he lived among women. What cannot be disputed is that the names in this Branch of the Service are hopelessly out of date. Besides, we don't like them and they lead to misunderstanding. The P.O. may once have been "a terrible man with a terrible name" (Southey), and the word Waterguard "one of the few, the immortal few that were not born to die" (Fitz-Greene Halleck); but to the ex-Naval man a P.O. is a petty officer, and to the public the Waterguard could never be thought to be anything but a sort of Coastguard. The extraordinary range of a P.O.'s work, and the immense and increasing scope of the job of which he is the principal unit, is in no way indicated by the name. In fact, it is positively misleading. We guard a lot more than the Water and the guard involves tasks much more positive than just "preventing" (we waive the error which occurs inevitably among the ignorant, including the compiler of a G.O. on one occasion: Preventative, which we class with the journalists' "Customs men").

Ask any one of a hundred people you meet to-day what a Customs officer is, and he will describe a P.O. or an A.P.O. But we do not want confusion with the Landing Officer to arise. Therefore, some other initial than P.O. which won't confuse (C.P.O.s should be Surveyors, of course) must be devised. One has thought of Examining Officer. Dynam advocated that once. It has its faults, but surely we can think of something?

As to Waterguard, some name must be devised which (a) indicates to the rest of the Dept. and to the public *all* the Customs duties a P.O. performs; (b) covers the fact that the Preventive

Service operates at airports, and may work inland on other jobs.

The P.S.A. Reorganisation Proposals of 1942 and 1943 (child of similar pre-war efforts) included a claim for a changed name. All our main anticipations are met in the post-war plan, though some not as fully as we hoped (e.g., period of training for new entrants). But the Executive are not, one hopes, overlooking the oddments such as car-driving, use of appropriate staff for full-time routine clerical duties, and hours of employment. Among these is the name of the branch. Perhaps it should be tackled now when a definite stage in the post-war changes appears to be reached. It might be difficult in a year or so when the present structure has crystallised.

At any rate we must make it quite clear that all of us feel that the present names are wrong and we accept them, as it were, under protest.

One has heard that there is a sentimental attachment to the old name "Waterguard." There have been constant name-changes in the Customs in its long history, but if we do not want to lose this could it not be given to the C.P.M.s or to the new body of "watchers," who will perform the minor duties formally done by A.P.O.s.?

SLIPPERY SAM.

INTER-PORT CRICKET CARDIFF v. LONDON

The post-war resumption of the battle for the Customs Fund Trophy opened when London visited Cardiff on June 6th, 1947. The match was played at Penarth on a wicket which is most kindly described as "natural." It had absorbed a deluge the previous day, with some more on the day of the match, but the rain ceased before play commenced. A high wind blew throughout, mainly across the wicket, but with benefit to the bowler bowling down the slope.

Cardiff won the toss and elected to bat first. Dai Davis, the London skipper, opened the bowling from the windward end, and Cozens from the opposite end took Frank Warren's wicket with his second ball (2 for 1). Jack Williams, Cardiff's other opening bat, was bowled by Davis in the next over, making the score 4 for 2. Hugh Jones played on in the following over—4 for 3. Lindley