

## Alcohol versus Gasoline for Automobiles

By Professor Robert Kennedy Duncan.



ALCOHOL is reproduced in the cycle of the seasons; it is absolutely inexhaustible; it is made out of sunshine and air, and its composition does not lessen the value of the soil or the energy of the earth. Gasoline, on the contrary, represents a part of the stored energy of the earth; it exists only to the extent of about two percent in petroleum, and its supply will in the future inevitably fail. To-day, the supply of gasoline is so much less than the demand that it practically cannot be obtained by many who would use it.

If all the gasoline-engines in America worked continuously for a day of ten hours they would consume some 4,000,000 gallons of gasoline! Then, industrial alcohol is practically constant in composition; gasoline, on the contrary, is a mixture, and is generally badly adulterated. Again, alcohol is beyond all question safer and more cleanly to use. Its safety lies in the fact that it is not so readily inflammable, and that it dissolves in water; in the event of fire, its dilution with water, even to its percent in whisky, will at once extinguish it. Gasoline, on the other hand, is extraordinarily inflammable, and, what is much worse, it floats on water; in a gasoline fire the more the water is used the more the fire spreads. This fact for alcohol is of extreme importance in the question of insurance and in its use for motor-boats. Still again, with alcohol, the smell of the exhaust is almost imperceptible; at any rate, gasoline, in this respect, could not endure comparison. Another advantage for alcohol lies in the fact that cylinders and valves do not become plugged with residual products, as with gasoline, and that its combustion is cleaner and its ignition more perfect. Perhaps the greatest advantage possessed by alcohol in a struggle with gasoline rests in the higher compressibility of its vapor; the compression of alcohol vapor may safely be carried to 200 pounds per square inch, while that of gasoline cannot endure more than 80 pounds without the danger of premature explosion. Next, it requires no more skill to operate an alcohol-engine than a gasoline-engine. Finally, it may be expected that alcohol can always be made in the locality of the demand; it will not require, like gasoline, transportation through extensive distances.

With proper manipulation, any engine working with gasoline or kerosene can operate, unaltered, with alcohol.

It can be operated with alcohol only at about twice the cost of gasoline. This is shown in a recent test of fuel economy, in which three automobiles, running on alcohol, a mixture of kerosene and gasoline, and gasoline, respectively, travelled from Trenton, New Jersey, to Atlantic City, 106.8 miles. While the alcohol-engine ran perfectly at a rate of thirty-five miles an hour, it consumed 14 1/2 gallons of alcohol, at 37 cents a gallon, constituting a total cost of \$5.36 1/2, as against the performance of its rival, which consumed 7 1/2 gallons of gasoline, at 22 cents, with a total cost of \$1.65. The relation of the two is best shown as the cost per ton mile, which for alcohol works out to \$0.0392, and for gasoline \$0.01354, about half as much.—From Harper's Magazine.

## Why There Should Be Less Haste In Trust Crusading

By President Woodrow Wilson, of Princeton.

PASSION for regulative legislation, seems to have taken possession of the country of late; but it came upon it so suddenly, so much more like an impulse of impatience than like a deliberate purpose, that there is every indication that the careful thinking upon which it should have been founded will succeed it after it has spent its force, rather than accompany and give form and direction to it.

We have passed laws forbidding such combinations and such practices as would virtually constitute monopolies and have attempted to enforce them. We have forbidden discrimination in freight rates by railway companies and have tried to detect and punish them. We have gone further still and endeavored to prescribe passenger rates as well, undertaking to look inside railway business and determine through public commissions what rates it is equitable for them to charge.

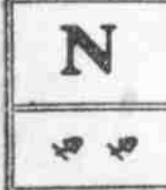
Governmental control, which we are undertaking so extensively and with so light a heart, sets up not a reign of law but a reign of discretion and individual judgment on the part of governmental officials in the regulation of the business of stock companies owned by innumerable private individuals and supplying the chief investments of thousands of communities. I can see no radical difference in principle between governmental ownership and governmental regulation of this discretionary kind. Regulation by commission is not regulation by law, but control according to the discretion of governmental officials. Regulation by law is judicial, by fixed and definite rules, whereas regulation by commission is an affair of business sense, of the comprehension and thorough understanding of complex and various bodies of business. There is no logical stopping place between that and the actual conduct of business enterprises by the government.

Such methods of regulation, it may be safely predicted, will sooner or later be completely discredited by experience. Commissions in the future as in the past will reflect rather public opinion than business discretion. The only safe process, the only American process, the only effective process, is the regulation of transactions by the definite prohibitions of law, item by item, as experience discloses their character and their effects, and the punishment of the particular individuals who engage in them.

The acts of corporations themselves must be checked not by futile and blundering attempts to dictate to each corporation how its business shall be conducted, but by bringing the officials directly to book who are responsible for forbidden or questionable transactions. The corporation itself never fails to find the really responsible official in its own processes of discipline, and it can be made to disclose to the public prosecutor the names of the men who should be proceeded against.

## An Aeronaut's Prose Poem

By J. C. McCoy.



NOW the clouds shut out from view all that human eyes are used to know, and a new world strange to man is all our own.

We are alone in space, where for eternal years only time has dwelt. Without direction to our way we travel on, for in these regions so remote to all mankind direction is unknown—no east nor west nor north nor south, does mark our path. The horizon, man's constant friend below, has disappeared, and eyes, burdened by the never ending distance, give up the quest of limitless space.

Sound fled from solitude so great, afraid to be alone, and even in our care she seems to be afraid and echoes back to safety from the cloud below. As far as eye can reach the scene is clothed in white, as though the snow of ages, piled on snow of ages gone before, is bleached forever by a never sinking sun.

Fantastic shapes of splendor undescribed are reared within the time of thought, but for a glance alone, and soon dissolve to give us a chance to view new shapes of greater splendor far, arisen at our side. The sun in splendor undisturbed since placed on high by nature's God, shines down through blue which skies imprison, and will shine on until the end of time shall come and man will be no more.

Faculties brought from below and used to tell us where we are and where we go are all at fault in this strange place, and though we fly as on the winds and with a speed equalled by thought alone, still it is as if we yet stood still and let the sloth pass by, for here no speed is known short of the speed at which the light is launched from worlds unseen and travels yet to meet our sight.—New York World.

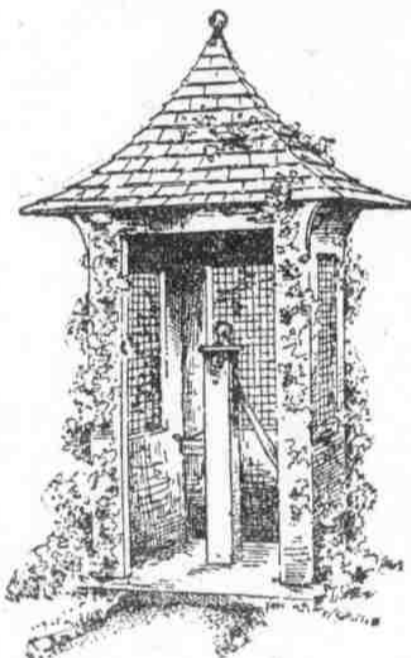


MRS. M. JABALY.

Who is Called the Most Beautiful Syrian Woman in the United States.

### An Attractive Well-House.

There are at least three reasons why an attractive well-house should cover the pump that is almost invariably a part of the country home equipment. A well-house helps to keep the water in the well cool in summer, and also helps keep the pump from freezing in winter. If constructed along such attractive



lines as are shown in the cut, a well-house may be made to add beauty to one's surroundings.

The one here shown is built directly upon the usual square well platform of plank, this being allowed to project some six inches all about the house. The roof curves gracefully out to the eaves that overhang the walls. If the doorway is on the north side, no door need be used in summer, but this should be in place in winter, and the latticed windows should then have a sash fitted to them, or one opening can be fitted

with sash and the other two covered with board shutters.

But the most important part of such a well-house is the planting of vines to grow gracefully over the walls and roof. A shrub or two planted at the base of the walls will also add to the attractiveness of the whole. So simple a little building ought to be within the possibilities of the home carpenter, and having been made by him will prove all the more attractive—at least to the family.—D., in The Country Gentleman.

### Game Preserve For Each County.

J. W. Wheeler, State Game Commissioner, hopes to interest the Illinois Legislature in his plans to establish a State game preserve in each county. He thinks a group of land owners in each county could get together and agree to protect game birds upon their tracts, prohibit hunting thereon and also feed the birds supplied by the game farm in Sangamon County. It is desired to secure a tract of not less than 1200 acres in each county for these branch preserves. The plan, it is said, has been worked successfully in California after a thorough trial, and it is believed it will work just as well in Illinois. Such protection and such propagation will greatly assist the State game department in the efforts to restock the fields and forests of Illinois with quail, prairie chicken, pheasants and other species of game birds.—St. Louis Globe-Democrat.

### First Railroads.

The first railroad was that known as the Stockton and Darlington, in England, opened on September 25, 1825. The first railway in the United States to be worked by locomotives was the South Carolina Railroad, started in 1826.

### FRENCH CONVICTS ON THE ISLAND OF ST. LAURENT, GUIANA.



—L'illustration.

## Fashions

New York City.—Coats that in one way or another are so arranged as to conceal the armhole seams,

### Riot of Colors.

In the bewildering mazes of colors that are in vogue this season there is always danger that too glaring colors or unbecoming tints, though effective, may be chosen. There is no denying that striking colors challenge attention, and certain complexions can stand brilliant colors.



make a notable feature of the season. This one, designed for young girls, is charmingly attractive and grace-

### Misses' Fancy Pleated Skirt.

There is no variation of the pleated skirt that is not in demand just now and this one suits young girls admirably well. It is plain over the hips and at the waist line, so doing away with all bulk at that point, while it is gracefully and becomingly full below. In the illustration it is made of one of the novelty materials trimmed with banding, but it is suited to almost everything seasonable. Plaids and stripes with bias folds of the same are much worn, plain on plaid material is in vogue and there are numberless ready made bandings, while also a plain stitched hem is always correct. Indeed, simple as the skirt is, it can be varied again and again.

There are nine gores with extensions that form the pleated portions and the fullness at the back is laid in inverted pleats. Above the pleats the edges of the gores are lapped one over the other and are stitched flat, while they can be trimmed with buttons as illustrated or let plain as liked.

The quantity of material required



ful yet quite simple withal, and allows a choice of three-quarter or full length sleeves. In the illustration porcelain blue Panama cloth is trimmed with black braid, but the little wrap is adapted to every seasonable suiting material. It would be charming made of any of the rough finished pongees or of linen quite as well as of wool, and it can be trimmed with straight banding or with applique or finished with stitched edges only as liked.

The coat is made with fronts, side-fronts, backs and side-backs. The fronts and backs are lapped over onto the side-fronts and side-backs, so forming the pleats over the shoulders. The sleeves are made in two portions each and three-quarter sleeves are finished with cuffs, but the long ones are stitched to simulate the effect.

The quantity of material required for the medium size is three and three-quarter yards twenty-seven, two and three-eighths yards forty-four or two and one-eighth yards fifty-two inches wide with four and one-half yards of braid.

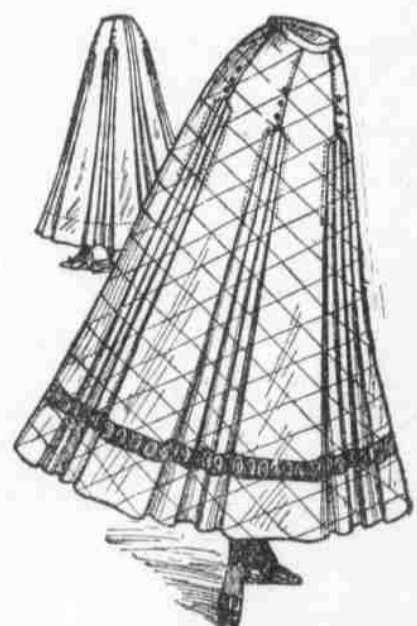
### An Emotional.

An "emotional" gown is of smoke gray velveting with little touches of blue and silver embroidery and dead roses at the belt. It is known as the "dear desire"—possibly because of the price.

### Popular Silk Patterns.

Sapphire blue foulard, patterned with white disks, dots, stripes, checks, Grecian patterns, or other motifs, is one of the popular silks.

for the sixteen-year size is ten yards twenty-seven, five and one-half yards forty-four or five yards fifty-two



inches wide with five and one-quarter yards of banding.

### Outline Tucks.

Some of the broad tucks in the new linen tailored blouses are sewn in with the outline stitch in mercerized cotton. This is merely the back stitch used on the right side of the material, and in contrast of shades it presents many possibilities.

### Smart Linen Gowns.

White linen gowns showing a touch of color are considered smarter than all white this season.