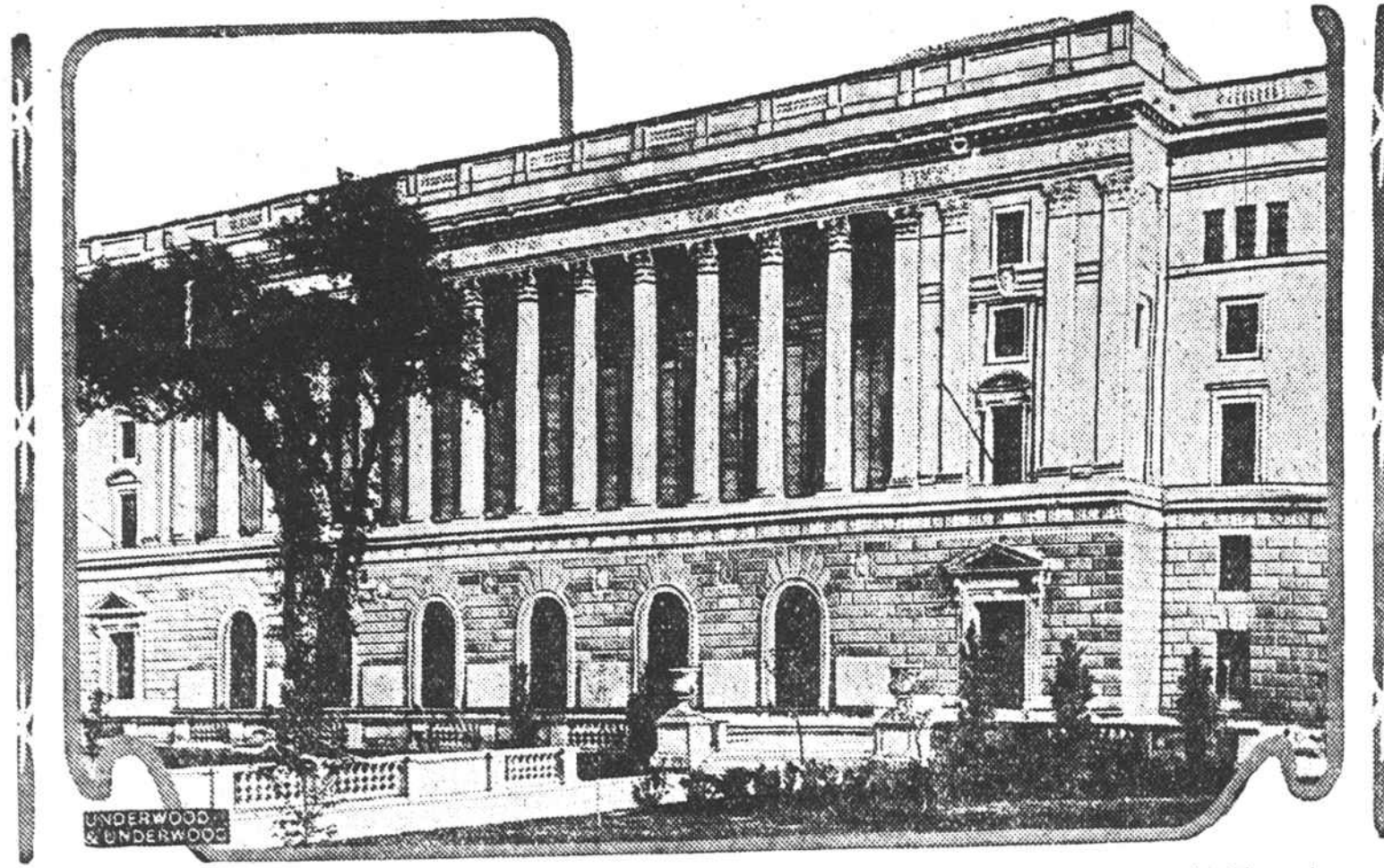


Illinois' Fine Centennial Memorial Building



Illinois' pride, the new Centennial Memorial building at Springfield, to commemorate the one hundredth anniversary of the admittance of the state to the union, is completed at a cost of \$2,000,000, and is destined to occupy a place of prominence among the most notable public structures of the nation.

Alcohol Found Good Motor Fuel

French Chemists Experimenting to Find Cheap Substitute for Gasoline.

Paris.—French chemists are carrying out a number of interesting experiments with a view of substituting the use of alcohol made from sugar beets, grapes and other by-products of French industries for imported gasoline.

Various interests in France have long attempted to render their country independent of the United States, Great Britain and Holland in the supplying of fuel for motors. This independence is considered so pressing that suggestions are made that a state-produced gasoline substitute may be made and its use in automobiles be made compulsory. It is proposed to call the accepted fuel the "carbureant national." The propaganda in favor of this national fuel has compelled the government and numerous scientific bodies to carry out many extensive and expensive experiments. The results of these tests were recently summarized in a valuable technical monograph prepared for the Association des Chimistes de Sucrerie et de Distillerie de France by M. Masfaraud, who showed that these results were obtained:

Efficiency Is Increased.

Alcohol motors are about 25 per cent more efficient than petrol motors. The combustion of alcohol gas is perfect and the escaping gases are quite odorless.

The general use of alcohol for fuel in motors is perfectly feasible and is to be strongly recommended.

No difficulties would be experienced in placing on the market motors built to operate with alcohol.

The necessity for the adoption of alcohol as a source of power was clearly demonstrated in France during the war. But there was such a demand for alcohol for the manufacture of munitions that means had to be devised to conserve the supplies of alcohol in France and ration them.

An official commission was appointed in February, 1922, by the ministry of finance to fix the price of alcohol derived from the current beet crop. It recommended the enforced use of alcohol as fuel, or as an adulterant of gasoline, as an expedient for providing a regular market for the by-products of the agricultural industries.

Beziers, in the department of Hiereault, was the scene last summer of extensive tests of automobile fuels made from mixtures of alcohol, gasoline and other substances. The results of these tests attracted considerable attention, not only in France, but throughout the world. Many mixtures proved valuable. The most effective results were obtained from a mixture suggested by M. Godehot, dean of the department of science of the University of Montpellier, which consisted of about 90 per cent gasoline, 9 per cent alcohol and small quantities of cyclohexanol and phenol. The committee in charge of the Beziers fuel tests was so impressed with the results obtained that it advocated legislation to compel the substitution of the Godehot mixture in place of gasoline for all purposes in France.

Notwithstanding the strong advocacy of a national fuel for France, the government has not yet taken a pronounced stand on this question because of the numerous economic problems involved. It would like to make France independent of imported fuels, cheapen the cost of automobile fuel and develop steady markets for the by-products of factories producing sugar, fruit, grape pulp, ciders and sherry, starch, wine, beer, brandy and similar articles. But difficulties arise from the fact that the price of alcohol is usually higher than that of gasoline and therefore the manufacture of the Godehot fuel would be expensive.

National Project Urged.

To overcome these economic prob-

lems it is proposed to establish a national alcohol office to control a monopoly of alcohol in France and to control the monopoly of manufacture of the "carbureant national." In order that the alcohol fuel might be sold below the price of gasoline the excess cost would be offset by taxes on wines, ciders and other alcoholic beverages. The French experiments instigated a series of similar tests in England. The Empire Motor Fuels committee had tests made with pure alcohol over the complete available range of mixture strength, with open throttle at piston speeds ranging from 800 to 2,000 per minute, and at compression ratios between 3.8 to 1 and 7 to 1. The results were very favorable to the use of pure alcohol.

The Germans have not neglected experimenting with alcohol as a motor fuel. There is an annual production of about 100,000,000 gallons of alcohol from potatoes in Germany, and some of this has long been used either in a pure state or mixed with petrol as an automobile fuel. It is found that a ton of potatoes, carrying about 10 per cent of starch, which promotes the fermentation, will yield 25 gallons of alcohol. As potato crops can be cheaply grown, they may in the future become important factors in the world's fuel supply.

Relief Offered by Corn.

In countries like the United States, which are favored with large corn-growing areas, maize might be used instead of potatoes. It is easy to raise, transport and store, and presents no difficulties in its conversion into alcohol.

Wood waste has been made to yield large quantities of alcohol. There are possibilities of using sawdust and the timber felled in clearing agricultural lands, as well as used lumber, for oil fuel. But practical difficulties will prevent the use of wood as a source of alcohol in all but a few favored localities. Distilleries using wood as a source of alcohol could rarely compete with those using farm products. Farmers have it in their power to produce a large number of crops suited to the manufacture of alcohol. The farmers of the United States alone could raise enough maize, potatoes, beets, and other crops to enable the world's motorists to substitute pure alcohol for petrol in all oil motors.

The Cubans make motor alcohol from the lowest grades of molasses and from bagasse, or spent cane fiber. Industrial alcohol has been made from these substances at a cost as low as five cents per gallon.

Throughout Central and South America alcohol has been used as a fuel, either in a pure state or admixed with petrol or kerosene. The results have

Builds Scaffold for Sister and Himself

Despondency over ill health caused the double suicide at Louisville, Ky., a few days ago, of George Schneider, fifty years old, and his sister, Anna. Schneider built a scaffold in a room of their home, and when his sister had hanged herself upon it, he ended his own life in the same way.

been satisfactory. Naturally, when a new fuel is used in a petrol motor without proper adjustments being made for it, smooth running cannot be expected. But when intelligence is employed in substituting alcohol for petrol in motors there are few grounds for complaint.

Tests in South Africa.

M. Masfaraud, in his address to the French Chemical association, drew attention to the experiments carried out in South Africa during the war and subsequently with alcohol-ether admixture fuels. Great success appears to have been met with in using a mixture called natalite, which is composed of about 54 per cent of alcohol, 45 per cent of ether and a little ammonia.

M. Lindet, a prominent French industrial chemist, has suggested the use of a motor fuel composed of an admixture of alcohol and acetylene. Many authorities look upon the suggestion favorably and in the near future it is proposed to test such mixtures on an extensive scale.

Among other mixtures tried in France those composed of alcohol, ether, benzol and pyridine, alcohol toluene and xylene and alcohol, benzol and petrol have given satisfactory results.

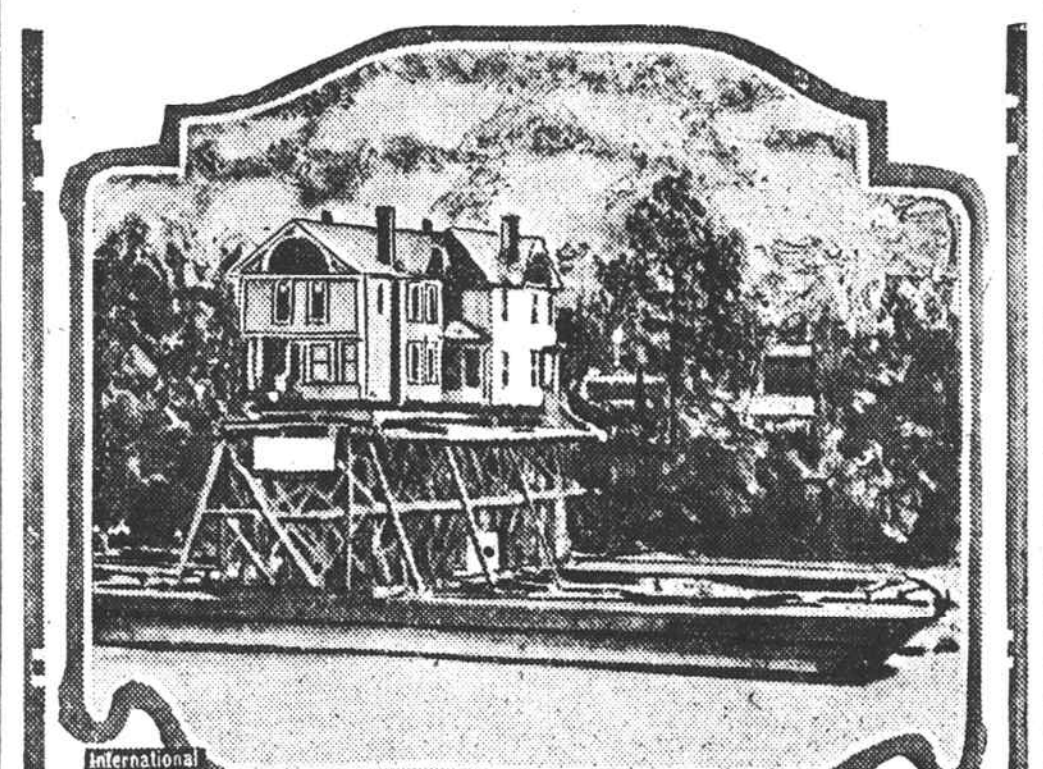
It seems probable, from a survey of the present state of the motor fuel problem in France, that it is only a question of time when alcohol produced from French agricultural products will be substituted for imported gasoline. This substitution will not be made directly, but by degrees. Mixtures of alcohol, petrol and other substances will be used and later, when the price of alcohol can be greatly reduced, it will replace the petrol mixtures.

The problem which at present confronts French chemists is how to produce a national fuel cheaply, and they realize, as one has cleverly remarked, that they must study the matter not only with present conditions in view, but with an eye to the future, or, as M. Masfaraud says: "Dans un avenir prochain."

Judge Bans "Cheek" Dancing.

Long Beach, Cal.—In what he announced from the bench as a determined effort to abolish cheek-to-cheek dancing in local places of amusement, Police Judge M. G. Hawkins ordered an offending couple to abstain from fox-trotting in Long Beach for one year.

Moved the Houses Across the River



The houses which stood on the ground recently secured for the site of the new West Virginia state capitol in Wheeling have been removed to a new location across the Kanawha river. The photograph shows one of the houses being taken on a barge across the river.

DETOUR MAPS ARE PLACED IN HOTELS

TOURISTS ADVISED OF ROAD CONDITIONS AND GIVEN CHOICE OF ROADS.

REPORTS ISSUED MONTHLY

This is New Service of State Highway Commission Which Became Effective With July Detours.

Raleigh. The state highway commission, for the convenience of motorists, has placed in the hotel lobbies of the state, large maps of the detours in effect during each month. This is a new service of the commission which became effective with the July detours. The purpose of the maps, it is said, is to indicate to a traveler going from town to town where he will have to detour. A man at Greensboro traveling to Raleigh, for example, would only have to glance at the map in Greensboro and see if any detours are marked up on the Greensboro-Raleigh road. He would then be in a position to choose his road so as to avoid detouring or, if two roads were not available, he would at least be advised of road conditions before he commenced the trip.

This service, it is believed, will be of great assistance to motorists passing through the state as, because of the great amount of road construction now in progress, many roads are being replaced temporarily by detours.

The detour reports of the commission which are issued monthly may be found in all public libraries of the state and will supplement the map so far as giving the exact mileage and location of all detours is concerned.

Large maps of the entire highway system of the state, it is stated, have been furnished to such hotels as would agree to display them prominently in their lobbies. These maps give the route number and are plainly marked so that a trip through the state may be made by route numbers taken from the map, aided by the route number signs which are along the roads at frequent intervals.

Expecting Great Farm Convention.

A good crowd of representative farmers and their wives will be present at the Farmers' and Farm Women's Convention at the State College on July 31 and August 1 and 2 according to reports that are now being received by James M. Gray, secretary of the convention. Mr. Gray thinks that this is because of the good program which has been arranged and because of the outstanding speakers which he has secured. The fact is, however, that North Carolina farmers have become accustomed to attending the convention and those who want to swap experiences with their neighbors are almost sure to come again. The college, as usual, is going to furnish free lodging but the guests are expected to bring their toilet articles and bed linen.

New Bern Labor Office Closed.

Temporary discontinuance of the State Employment office at New Bern was announced by M. L. Shipman, director of the Employment Service. Withdrawal of the appropriation made by the American Red Cross immediately after the disastrous fire in New Bern last December is given as the reason for abandoning the office. Assistance from the county or city will ensure its reopening.

New Bern is omitted from the list of offices reporting placements during the week, and the aggregate totals announced are appreciably smaller than the placement for the preceding week. A total of 618 men and women applied for work, 575 employers asked for help, and 398 men and 81 women were found employment during the week, according to the report.

More than half the number placed during the week were classed as unskilled labor, the figures being given at 311. The demand for unskilled labor is still great, but the number available during the week is taken as an indication that the exodus of negro laborers to the north has been checked, and that more of them are seeking work at home.

Skilled labor maintains its second place in the line, and domestic help third, and clerical and professional a bad fourth. Not an office in the state has a skilled or unskilled laborer listed for more than 24 hours at the time.

Prohibition Director Makes Report.

Salisbury.—North Carolina moonshiners lost exactly 111 illicit stills; 1,234 gallons of rum; 67,925 gallons of malt liquor; 17 automobiles and property valued at \$30,000 during the month of June, according to the report of activities of federal prohibition agents in the state, issued by State Director R. D. Coltrane, who headquarters here.

Sixty arrests were made and 133 prosecutions recommended. The mixture of liquor and property during June was smaller than April or May.

Cotton Crop is Most Promising.

"The cotton crop of North Carolina is unusually promising considering the planting seasons and is the largest in its history," according to a statement issued here by Frank Parker, statistician of the co-operative reporting service of the United States and North Carolina departments of agriculture. The report is based on information received from 26 counties of the state.

"With the acreage at 103 per cent," says the report, "North Carolina shows the least increase of any state. The average for the cotton belt is 12 per cent increase. It is reported that the increase would have been more had the April report not been given publicity. That report showed the same acreage per cent according to the planting intentions of several thousand cotton farmers. It is further recognized that it was the speculator who suffered most by that 'intentions' report, which indicated prospective planting.

"The present condition of 80 per cent of a normal or full crop prospect for 256 pounds per acre, if applied to the 1,703,460 acres, means that the crop might be over 910,000 bales if the state conditions remain favorable. The boll weevil and adverse weather conditions must be reckoned with before early frost gets its share. These figures are based on conditions now and do not include any but favorable influences to follow. The last crop made 350 pounds per acre and 851,000 bales.

"There are estimated to have been planted in the United States the greatest acreage of any year, 38,287,000 acres with a prospective yield of 11,412,000 bales or 17 per cent increase over the 1922 production. The present condition prospects are 1.3 per cent below last year's report and six per cent below the 10 year average.

"The weather conditions in North Carolina have been unusually favorable for cotton during June. The recent rains have helped to relieve the drought that might soon have become serious, even on cotton. The boll weevil has not become noticeably bad but its presence and activities are now claiming the attention of the southern cotton counties of the sate.

Weevil Declared Not Poisonous.

Inquiries received by the state board of health from widely separated sections of the state indicate a fear of the boll weevil that is entirely unfounded. The state board of health is advised that this pest of the cotton plant is without danger other than the damage which it does to one of the state's leading farm products.

The boll weevil is not poisonous. It does not infest fruits or berries, nor any of the garden vegetables, such as corn, beans, cabbage, lettuce, okra, tomatoes, or the like. The only food that satisfies the appetite of this insect is the cotton boll, and it eats this preferably when young and tender, when the squares are just forming.

Popular superstition has enlarged the field of activity of this insect which is having a revolution in the agricultural habits of the entire south. In some sections the weevil is reported in the blackberries. From another comes the report of having found it in the okra. A far eastern county attributed a serious illness to the weevil having been cooked along with some snap beans. A Piedmont county thought it was infesting the cabbage. In all instances a consuming fear seems to have taken possession of some of the people lest the boll weevil take their lives.

In answering such inquiries the state board of health has endeavored to reassure those unduly fearful with the definite statement that there is nothing to fear from the boll weevil except the partial destruction of the cotton crop. The insect is not poisonous and infests only the cotton plant.

N. C. Leading in Building.

For the first time since March, 1922, the number of permits issued for new work in twenty-four of the leading cities of the Fifth district was lower in May than the number issued during the corresponding month of the previous year, but several North Carolina cities were among those figuring in increases of newwork, according to a study of the Monthly Review of the Richmond Federal Reserve Bank just made public here.

May, 1922, permits totaled 2,272 in comparison with 2,475 issued in May, 1921. In the estimated cost of the work also, May of this year dropped below May of last year, the totals being \$11,443,583 and \$12,548,712 respectively, it is stated. The combined valuation for both new work and alterations or repairs totaled \$13,461,852 in May, 1923, in comparison with \$14,451,569 in May, 1922, a decrease during the current month of 6.8 per cent, according to the Review.

Mail Checks to Growers.

Checks aggregating more than two million dollars went out to the thirty odd thousand members of the North Carolina Cotton Growers' Cooperative Association, one day from the Raleigh headquarters. General Manager U. B. Bialock announced.

These checks represent the fourth distribution made to members, bringing the total advances up to 22 cents a pound, basis middling, and making a grand total of fifteen million dollars that has been paid out on the 135,000 bales of cotton.

Baby Ceased to Fret After Had Teeth

"When my baby began to get teeth he was so fretful and I couldn't do a thing with him. I took all my time to nurse him. I couldn't look after my other children. I writes Mrs. Anne Reeves, Roswell, Ga., that her baby was giving him teeth. He was so fretful and has been so ever since."

Teethina is far superior to any other teething syrups and tablets for quieting a fretful baby. It contains no opiates or other perfectly harmless. Children who don't thrive on anything else, will thrive on Teethina. Send for a trial bottle.

Teethina is sold in drug stores or sent by mail to the following: Cuticura Laboratories, 1230 Broadway, New York, N. Y. Moffett's Dispensary, 1230 Broadway, New York, N. Y. Advertisement.

WOMEN NEED SWAMP-ROOT

Thousands of women have bladder trouble and never suspect it. Women's complaints often are nothing else but kidney trouble, result of kidney or bladder disease.

If the kidneys are not in a healthy condition, they may cause the other organs to become diseased. Pain in the back, headache, loss of vision, nervousness, are often symptoms of kidney trouble.

Don't delay starting treatment. Kilmor's Swamp-Root, a physician's prescription, obtained at any drug store, is just the remedy needed to overcome such conditions.

Get a medium or large size bottle immediately from any drug store.

However, if you wish first to get the great preparation send ten cents to Kilmor & Co., Binghamton, N. Y., for a sample bottle. When writing be sure to mention this paper.—Advertisement.

Hard to Locate. "Borrowing from Peter to pay Paul is bad business." "It is for me, but such a hard time finding Peter."

MRS. HICKEY SO WEAK COULD HARDLY STAND

Tells How Lydia E. Pinkham's Vegetable Compound Restored Her Health

Worcester, Mass.—"I had a terrible trouble caused by a female weakness and got so weak that I could hardly stand or walk on the floor. The doctor gave me all kinds of pills, but none helped me. I happened to see a friend who had used Lydia E. Pinkham's Vegetable Compound, so I bought a bottle and would try it."



taking it a week I began to improve and now I feel fine and am doing my housework, including washing and house cleaning. I have mended my medicine to my friends and I am willing for you to use this as a testimonial, as I would like to see any one suffering the way I did from a weakness."—Mrs. DELIA HICKEY, S. Indlow St., Worcester, Mass.

Lydia E. Pinkham's Private Remedy upon "Ailments Peculiar to Women" will be sent you free upon request. Write to The Lydia E. Pinkham Medicine Co., Lynn, Mass. This booklet contains valuable information.

ALLEN'S FOOT-EASE FOR THE FEET

Sprinkle one or two Allen's Foot-Eases in the Foot-Bath and soak your feet. It takes the sting out of corns, Bunions and Swelling. Achieve Foot-Ease, lasting comfort, shake Allen's Foot-Ease in your shoes. It takes the friction from your shoes, rests the feet and makes walking light. Always use it for dancing parties to break in new shoes. Over the Five Hundred Thousand pounds of Allen's Feet were used by our Army and during the war. Trial package sent Free. Ease Walking Doll sent post free. Allen's Foot-Ease, Le Roy, N. Y.

INFLAMED EYES

Don't treat your eyes with powders, drops or any other irritants. Use Mitchell's Eye Elixir. A soothing, effective, safe remedy is best. 50 cents—All drug stores.

PARKER'S HAIR BALM

Remove Dandruff, Itchiness, and Restore Color and Shine to Gray and Falling Hair. Beauty to Gray and Falling Hair. 50 cents. Dr. J. C. Parker, Lowell, Mass.

HINDER CORNS

Remove Corns, Bunions, etc., stop all pain, ease walking, make walking easy. Hinder Corns, Lowell, Mass.