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COOD WOMAN, COOD CHILDREN, ood Roads

the Movement for Country Road Improvement by Children Better Schools Also **Result From This** Fortunate Combination, the Result of One Motherly Idea

By Ellen Foster Stone

THAT is the use of a very good teacher and a very good school unless there be a good road to reach them? In season of drought dust obscures the way. It is not uncommon experience for a party starting out, each wearng clothes of different color, to return uniformed, "wearing the very roads on their backs," as the jocular member puts it, while questioning, "What color did you buy?" Dust is bad enough, but when this dust becomes mud!

Not many months ago, while visiting after years of absence a most prosperous agricultural section, noted for its fine apples and "best butter," the beauties were appealing one by one. The heavens above, clear as sapphire, delighted the eye, as did the sur-rounding hills, gay in their autumn garb, revealing wondrous colorings; but from this panorama one must turn to consider the earth beneath to insure safe footing in the quagmire. Some-children trudging bravely along, picking a dainty way, were asked, by way of making acquaintance:

"Do you go to school, children?" Imme-"Ď-

the constructionists, improvers or maintainers of the roads over which they travel, developing their country while developing themselves.

'Stay-at-homes" and "fair-weather travelers" only will become fewer in number. The monotony of shut-in life will make less havoc with physical and mental health. More contented people will be found in rural sections. The text will be not "Back to the soll," but "Stay on the soil."

For year's various organizations of mothers, in their work for world welfare through child welfare, confined their efforts mainly to childhood in the cities and smaller towns. It was found that the city child was the "hopper" which was being poured most of the helps and blessings-all of which were justly due-and the country chlidren were deprived of much of their rightful heritage, Studying more closely, interviewing the rural youth flocking to the cities, it was learned that chiefly were they urged by the natural instinctive desire of the young for life, for pleasure, for companionship of their kind, the comradeship of touching shoulders, as it were, with other folks.

A MOTHER-HEART'S REVELATION

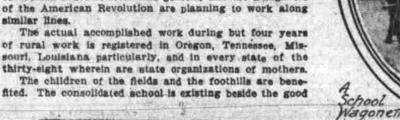
A mother-heart received the revelation: . Impassable roads, unbridged streams. Exiled boys and girls in far too many localities. Lack of recreative amusement, a

department of agriculture, has roused the womanhood the nation and its territories to organized effort. of

In a special department of the national congress and as special agent of the agricultural department, Mrs. Garmo is preaching highway improvement in the De interest of mothers and school children. The Federation of Women's Clubs, state and general, and the Daughters of the American Revolution are planning to work along similar lines.

of rural work is registered in Oregon, Tennessee, Missouri, Louislana particularly, and in every state of the

fited. The consolidated school is existing beside the good





Bad

Roads

School

Attendance

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Decrease

so, after experiment and conference with national and state highway officials and superintendents of education, the Congress of Mothers, in its rural welfard department, evolved the organisation at present termed the Road Cadets of America, or the Cadet Road Patrol.

The object of the organization is to familiarize the boys with commercial, educational and social value of the roads, to enable them to acquire the principles and practices of roadmaking; the causes and affects of good roads; their location, grades, drainage, maps and profiles, construction and maintenance; machinery necessary in road building, and to practice a certain light military drill in current tactics which will develop discipline, chivalry and loyalty as characteristic of every vallant road cadet. More dignified, erect and civil in their bearing the road cadets become, more respectful to parents and teachers, more orderly in their habits, more conscientious, more careful in dress, thus eliminating the stigma of "country town" and "hayseed," too often resting on manly ruralite.

On arbor days, led by the cadets, the school children plant trees along the roadways, learning not only the value of the tree and improved road, but the connection between the tree and the road, the various kinds of trees adapted to roadside planting and the extent and character of tree planting adapted to the kind of road. Hickory, pecan and walnut trees are planted where they thrive, as are shade trees, also, where most needed.

The boys learn in their patrols of the road, and each company patrols a certain number of miles, the origin of roads, the trail, the footpath of the ploneers evolved into earth roads, the corduroy road, the charcoal, gravel. rock or concrete roads. They soon know which are state, county or neighborhood roads; what permanently improved roads mean to a community, how they effect rural mail delivery. They find out what grade means and the loss in haul over steep grades; the vital importance of drainage and the necessity for maintenance; the importance of prompt repairs and how to make them.

The use of the split-log drag is easily learned, and the boys are impressed with the fact that it is the solution of the whole earth-road problem the country over.

PATROLS KEEP LOGS

Each patrol is required to keep a log, and prizes are offered for the best. In this log the condition and kinds of roads are noted, the number of accidents and why. Danger signals, sign posts, bridges and culverts, weeds, clods and rocks in roadbed, all are considered. The cadets are under direction of highway engineers, who letermine the territory patrolled. Their drill is that of United States army infantry regulations.

Constant instruction of this kind will produce citizens who will not tolerate a long line of liquid morass and dignify it with the name of roadway. "Mudways" will disappear much quicker by this system of education than by legislation.

diately came the answer: "Nope, not now. Roads is too bad; spoil our shoes." A child denied its birthright! Shoes and roads as against human development was the fact impressed.

OAD conditions are not exaggerated by those urging improvement. It is not difficult to find bad roads; rather it is difficult to avoid them once the main highways are left. But all homes are not on main highways. Our rural population is a scat-tered population living along roads accepted through habit as matters of course rather than matters to be remedied-the sort of roads you go through rather than over; the sort of roads that place a mud embargo on educational, industrial and social life.

Did you ever attend a carriage-cleaning fest in a rural district? How the whole family, the hired help and the visitor fell to to remove the marks of travel from the conveyance caught in a sudden downpour of rain and uprising of mud some miles from home! Such a incking up of wheels and laborious water carrying! A mort of frolic for the visitor, perhaps; but to the family repetition year in and year out gradually causes the older folks to become stay-at-homes. And the young folks? They go to some city oftener than not.

To restrain this appalling exodus of country children to the city, to build up the rural communities by furhing mental and moral instruction and entertainment, in a work undertaken and designed to be carried to successful completion through highway improvement.

It is known that hundreds of thousands of country children are deprived of the rudiments of education because of road conditions. In Texas alone, 130,000 children were out of school in 1909.

In our mountainous regions, we are told, over 4,000,000 children are almost wholly untouched educationally. Facilities are of the crudest and altogether inadequate. In some localities the dry creek beds are the roads to the faraway school to which the eager youngsters walk gladly.

The dreary monotony of the poor road locality, the lack of prosperity, the restricted crops, the illiteracy,~ are drawbacks to general development and progress.

GOOD ROADS AND SCHOOL ATTENDANCE

In our country there are about 37,000,000 children, a power for weal or woe as is their advancement or retardment, All improvement comes through intelligent effort.

Ancient wisdom built roads for war. Rome, that she might swiftly,' safely march her men to victory, compelled the building of roads which today are invaluable egacies. Modern thought built roads for commerce. The twentieth century will have good roads for social and educational advancement; this shall be twin to economic development. Improved roads increase school attendance and increase the general production of marketable stuffs.

But how are we going to get this improvement? How pay the price? We are paying the price, though it is not so itemized in accounts. Bad roads, restricted crops, are the highest taxes we pay. Far more than is realized is living's cost affected by road conditions. All that we sat and drink and wear, our shelter, light and heat, come primarily from the soil-and first the materials, raw or finished, must be hauled over roads to stations

raw or finished, must be hauled over roads to stations and wharves for shipment-or to markets for sale. In our country are 2,150,000 miles of roads. Only 9 per cent, or 178,000, are improved. Yet yearly almost 2,000,001 tons of products must be hauled. The figured cost of hauling over poor roads at lowest tonnage rate is over \$400,000,000 annually. This could be reduced one-half by road improvement. Good roads would pay for themselves in ten years at this rate. To turn our com-mon earth roads into good gravel highways would cost 10,000,000,000, and while it is much to be desired, we cannot expect the road millennium at this price to sud-danly appear.

annot expect the road millennium at this price to sud-enty appear. But who can gainsay what will happen, or how soon, ow that mothers are turning road builders? A mother, the segrend has it, built the first home merging into a cave, about which entrance she planted he first garden, when feeling the need for shelter and out far her young in primal days. Later we read where the toeketh well to her household, she planteth a vine-end. And now today, among her many activities in ar wider home-making, she has awakened to thermeeds immoved roadways. To longer are mothers content to keep the children home because of bad roads. They have formulated home for keeping the children is school because of good onds. and maker yet, the children are to be largely

dearth of sociability or opportunity to enjoy it. And this mother, a city dweller now of St. Louis, then in Shreveport, La., thought out a plan whereby the boys and girls might stay at home and he aided to lift these veils of monotony and dreary routine; to gain stimulus through recreation and education and add to their sturdy characteristics the buoyancy which comes through joy In doing; to enable them by their own efforts to bring the best of life to their very doors: not to desert the homesteads for city life, but rather to stay where there is room to grow, thus strengthening the vertebra of their country.

And is it fanciful to believe the roads and waterways are bones and sinews of a country's body? The picture would not fade from Mrs. De Garmo's vision. She saw a pleasant road well kept, beside it a model schoolhouse, a consolidated school to which the children from some miles might come, there to receive not only book learning, but education-manual arts, domestic arts, physical culture, the study of hygiene and sanitation. But how, oh how, with such highways and means of conveyance so limited? Betler them, that's all. Another how? -

First of all, the story must be spread, and Mrs. De Garmo evolved a plan, very simple but wholly effective. Publicity, through the great American press; education, demonstration at state fairs and by stereopticon; then legislation, federal, state, county and local.

So it transpired that Mrs. Frank De Garmo was the first woman to launch a campaigh for road improvement in any country, under the authority of the national cone gress of mothers, which, through the indorsement of the president of the United States and co-operation of the



Company A, First Regiment, Missouri Division, Rural Cadets of America. This is a Cadet Road Patrol That Gave a Demonstration at Lyndhurst Boy to Right of Captain Won. First Prize of \$5. for Best Log of Unimproved Road

roads. The wagonettes traverse these roads, picking up the children before the school hour, depositing them at the model schoolhouse and returning them to their homes at closing time.

In Southington, O., eleven wagonettes are in use, carrying over one hundred children daily to school. It is found that the expense of maintenance of the one consolidated school and the necessary wagonettes is less

than that of the numerous small schools of primitive appointments, scattered here and there along the way, each with separate equipment and teachers.

But what about road improvement and maintenance? Well, tomorrow's roadmakers are among today's \$7,000,000 school children. Why not teach them now the elemen-tary principles of road making and implant the belief in the necessity for improved avenues for traffic? And

will disappear much quicker by this system of education than by legislaticn. Five years is the time the mothers have set in which to accomplish the proposed improvement. Then, with well-kept roads between homes and schools, will come the real help to rural progress, the consolidated school as a recreational social center, where may gather at will the community for instruction and entertainment by illus-trated lecture, song and story. Enlightenment by the traveling university or library will be open to all. Ocular demonstration made at state fairs is a great aid in suggesting help. A model home, a model school, connected by a model road, is a permanent part of the state fair in Louisiana. The buildings, completely fur-nished by the handicraft of the school children under 15 years of age, show the possibility for economical and artistic furnishing in any rural home. A day nursery was maintained in the model home, where hundreds of infants were cared for while their parents saw the fair. Here also, on Mother's Congress day, the governor drove the split-log drag before the grandstand to demonstrate its use. The whole exhibit resulted in passing the best road laws the state has had.

Teeth From Pebbles

T IS wonderful where man will go for crude material with which to manufacture something that is in demand throughout the whole world, or in some particular land or district.

some particular land or district. Men and boys on the coast of Normandy, between the towns of Dieppe and Havre, on the English channel, are searching daily for a certain kind of small stone or pebble. They carry sacks, and when these are filled they take them to a superintendent, who pays them about one franc. Then the stones are packed and shipped to the United States, where, through certain mechanical processes, these Normandy pebbles are re-duced to the finest kind of modern porcelain, which is used in the manufacture of faise teeth. No stone yet found answers the purpose so well as

No stone yet found answers the purpose so well as the small pebbles picked up on that distant shore from among dozens of other kinds of rocks. This is a growing industry in Normandy, and those engaged in gather-ing the rock seem to feel they earn their money easily.

along on; but Mrs. Coates, down to about the ninth generation from Charlemagne, had nothing but kings-of France, Italy and England-to acknowledge in an ancestral showdown. It comes pretty near being a royal flush.

tral showdown. It comes pretty near being a royal fush. Or fake one of the shorter pedigrees, like that of Edward-Cogswell Converse, of New York. He whoops hack through twenty-two generations to Edward I of England. So he's about one, eight-millionth part royal. Where a healthy man can use one eight-millionth part royal. Where a healthy man can use one eight-millionth part or of a king in New York eity would be hard to guess; and where that one eight-millionth part ought to stick out would be harder. But suppose it turned up in his whiskers. The actual number of hairs in a New York man's whiskers hasn't been publicly announced yet, be-cause they mostly shave. But allowing as many as \$0,000 of them to a strong, hearty set of whiskers, he would have just one one-hundred-and-sigtleth part of a hair that he could claim as his share of royalty. Now, if he could grow that hair five inches long and could determine which thirty-second part of as linch of it was truly royal, and then the pink haby ribbon above and below that fragment, why, it might be made visible to the naked eye. But if the royal part should happen to stick permanently in the roots, there would be hope, at all.

A LITTLE BIT OF HUGH CAPET

A LITTLE BIT OF HUGH CAPET Suppose you're like Mrs. Jonathan R. Bullock, of Bristol, R. I., with grandfathers who reach right back, through the thirty-three generations behind you, on past Pawtuxet, R. I. and beyond Lady Gwenthellean de Talbot de Turberville, of Glamorganshire, to Hugh Capet, who was king of France. Well, one sixteen-bullionth part of you would be royal. On the other hand, suppose you're Mr. Neill Mc-Coul, of Richmond Va. and hit the royal trait at the fifteenth ascension, landing on Robert II. king of Scotland. You have the pleasing mathematical fact to brace you up that one fifty-six thousandth part of you is royal, or nearly one-twentieth of an ounce if you get back to Egbert, who was king of England thirty-three generations before Professor Francis S. Sampson, D. D., was born for the good of humanity and of Union Theological Seminary, at Hampden-sidney, in Virginia. This latter has one sixtsen-buillonth part of royally left in him. It's simply wonderful how the Inheritance of royal mode will tell. There was Charlemagne's grand-dad. When it reached the fortieth adulteration, and mounted to only one two-trillionith part of Charles Chauncey Darling, of Utlee, N. Y. that one two-trillionth fraction of Charles the Hammer helped yo make up the modern owner, General Charles Charles, Charles, Jan.

make up the modern owner, General Charles C. Darling. There are, it appears, about 700 more who have e millionth or a billionth part of themselves to boast of as royal. The documentary evidence is all there; but it is liable to prove mishty incorvenient to demonstrate the leavening of, say, 147 pounds of Colonial Dame by means of one sixty billionth part of a dusty old royally that The rattling around amid her avoirdupols. The worst of this scientific. Davenport calculation is that the further back you have to chase your king, the less of him yous have in you to make you royal.

American Ratio of Royalty; 1 to 5,000,000

THE cold eye of science-imagine it, frosty, calm, unbiased, unbribable-has been turned on human heredity and has reduced to mathematics the extent to which ancestry plays its part in every generation's

make-up.

The frosty eye aforesaid ducked scientifically the modern American passion for genealogy, perheps because that is a department belonging strictly to the Order of the Crown and pink teas; perhaps because it might make trouble among a lot of descendants who have proved better satisfied with ancestors than with themselves. But it has nevertheless revealed the exact mathematical truth about distinguished ancestry so clearly, so indisputably, that when its chill and painful facts become universally known, there will be heraldry experts hunting jobs as card cataloguers and Colonial Dames sandpapering royal devices off the doors of theil motorcars. They may even use plain notepaper after this; who knows?

R IG books have been published about them. One is limited to Colohial Dames and the members of the Order of the Crown. There are 543. These democratic or republican - United

States have the royal honor of including in their population 543 ladies in whose veins flow the purple drops that prove them the descendants of kings. The drops, of course, don't flow separately, so's you can notice them; they're all mixed up with the common, red drops that came down along with them from the butchers and bakers and candlestickmakers; but they're there, circulating, just the same. You can tell their existence by the fouches of royal condescension their existence by the toucnes of royal condescension they give to some woman who, otherwise, might harshly refrain from associating with the rest of the world at all. You can also notice that, when the leucoytes of one drop encounters the red corpuscies of another, they shrick: "Oh, gracious heavens! me long-lost sisters!" and proceed to eat 'em alive, just as kings and queens used to thew up one another in the Dark Ages before Benedict Arnold transplanted treachery into democracy.

Dark Ages before Benedict Arnold transplanted treachery into democracy. This scientific heredity thing has been worked out by scientists. Recently one of them wrote: "There are hardly two persons of European origin, who are more distantly related than thirtieth cousin --or who do not have a common ancestor of the time

of King William I of England-" Hold up-easy there! He isn't saying they all have King William as their ancestor; there's no need to phone the heraldry man to make out another ancestral tree on the strength of the original William. Of course, if he'd said Henry VIII. It might be different; Henry had a record-not perhaps equal to some of his successors, like those amons the Georges and the Ed-wards; but he has specifically named William L and as specifically referred to a common apasstor in William's

ums. That may have been any old Saxon who was among the also-presents when William, red-headed and hopeful, made his acquaintance with an ax \$00 years ago.

entist; "the enormous number of our ancestors resulting from the fact that the number (theoretically) doubles

entist, "The enormous number of our ancestors resulting from the fact that this number (theoretically) doubles in each earlier generation, so that there are more than a million in the twentieth ascending generation and more than a billion in the chytieth, then we see that some degree of consenguinity in the parents is to be expected." Not only that, but maybe some degree of uncertainty about the ultimate ancestry is to be counted on. For instance, there are the half dogen of Mrs. Lide Campbell Grissim Leib, who belongs to the Virginia and California Societies of the Colonial Dames, to the Order of the Crown and also to Etc. Their father is Samuel Franklin Leib, but we needn't waste any excitement over him. He's just a judge in San Jose, Cal. The royal descent of those children's mother, like the name of about ben Adhem, leads them all; and it harks back to buily old Alfred the Great, the king of England, through thirty-six generations. Count them-thirty-six. That makes some 65,185,000,000 ancestors those children had be about your why Mr. Davenport was so scrupulous and scientific about putting in that word "theoretical" in parentheses. He knew that there weren't more than aixy-five billion people in England when Alfred reigned. Fact is, after you count Alfred and the peasant lady who roasted him for spoiling the ash cakes, and Lady Ethelblich, who is mentioned in small type as having been married to Alfred, there weren't more than about a million more-cooks, crooks, bottle washers and plain and fancy robbers.

cooks, cropks, bottle washers and plain and fancy robbers. But it's not only the number of ancestors that is to be reckoned with. Scientists, such as Galton, figure that a child inherits one-half of himself from his parents; one-half of the second half from his great-grandparents, and so on, halving the remaining half until in twenty genera-tions he has about one-millionth part of any ancestor. Now, there is Mrs. Fiorence Earle Coates, the gifted writer, of Philadelphia, whose descent is traced by Charles H. Browning, the same accurate authority who chased down the ancestors of the Colonial Dames. He got down to the pedigrees of 256 Americans, who were built that way without the assistance of the new soci-eties and orders, and he never stumbled over a bar sin-ister in the whole bunch. Mrs. Coates, who is the daughter of George H. Earle, had Charlemagne for her ancestor-at least that's where Mr. Browning quit. Charlemagne belongs thirty-seven generations back of Mrs. Coates; but he's there. In the same size type as Alfred the Great for Mrs. Leib. So that gives her one-two fundred and sixty billion, five mundred and forty-

two hundred and sixty billion, five hundred and forty-four millionth part of Charlemagne to go on, the mater-nal side of the first generation not counting, necessarily, for the Charlemagne blood supply. This would seem to be rather short allowance for a royal descendant to get

"When we recall," remarks the mathematical sci-