CONDEMNED NURSE DIES LIKE HEROINE

Loyal Woman Shot by Germans "Glad to Die for Country"

"PATRIOTISM NOT ENOUGH" SHE SAYS

Declares No Bitterness Held Toward

lain in Brussels, who visited Miss Edith Cavell just before her execu-tion, and a letter, from Brand Whitlock, the American minister to Belgium to Walter Hines Page, the American ambassador in London. In his letter, Mr. Whitlock says he requested that the body of Miss Cavell be delivered to the School for Nurses, of which she was the directress, his request being referred to the ministry of war in Berlin. Rev. Mr. Gahan in his report says:

"On Monday evening, October 11, I

"On Monday evening, October 11, I
was admitted by a special passport
from the German authorities to the
prison of St. Gilles, where Miss Cavell
He then began to count: "One, two. had been confined for 10 weeks. The three, four; one, two, three, four. final sentence had been given early Goodbye."

"To my astonishment and relief I found my friend perfectly calm and re

SIMON LAKE



Capt. Simon Lake, inventor and builder of submarines, says if the war continues for two years England will have to use cargo-carrying submarines to Import food from the United States.

signed, but this could not lessen the tenderness and intensity of feeling on either part during that last interview

almost an hour.
"She said that she wished all her "I have no fear nor shrinking. I have seen death so often that it is not have seen fearful to me."

All steam and electric lines serving Portland are offering fares of one and a third for the round trip and sale dates have already been announced. While the exposition is in progress. strange or fearful to me.'

"She further said: 'I thank God for many cities, towns and cou

weeks of quiet before the end. My life has always been hurried full of difficulties; this time the rest has been a great mercy. They have all been very kind to me here.
"'But this I would say, standing as view of God and eternity:

'A German military chaplain was with her at the end and afterward gave her a Christian burial. He told

last. She professed her Christian faith and said she was glad to die for her country. She died like a heroine.

Villa Soldiers Fight Federals. Douglas Ariz -A sharp fight be-

Carranza troops from Agua Prieta, So-nora, occurred Sunday between Agua Prieta and Eronteras, according to reports received here. The Carranza

The skirmish was said to have redeserters from the Villa column, were reported to have deserted when they learned the United States had recognized General Carranza.

Springfield, Ill.-Mayor Davis, of Murphysboro, Ill., said Thursday that crowded by thousands. Emperor V he would preside at an indignation meeting as a protest because Governor Dunne granted a 30-day reprieve to Elston Scott, who was to have hanged Friday. The governor reprieved Scott because of reports that a recent hanging had been a spectacle. "The gov-ernor was misled. Everything at the hanging of Joe Deberry was conducted

California Jersey Wins.

mayor.

with the utmost decorum," said the

pounds of butterfat did Pearl of Vendera, a Jersey cow owned by Guy C. Miller, of Modesto, Cal., win the championship in the Jersey class at the Panama-Pacific exposition of their men. ord for one year. Other prizewinners included Albien L. Gile, Chinook, Wash., for junior and reserve junior champion cow classes.

Cordoba Made New Coin.

San Juan Del Sur, Nicaragua,-The final conversion of the currency of Nicaragua will be concluded October 30, after which the cordoba will be the

WIRELESS TELEPHONE CARRIES U. S. WILL SUPPLY

New York.—Arlington, Va., talked by wireless telephone with Paris, France, Saturday. Honolulu also heard the operator talking from Ar-

had been successfully projected across the Atlantic was made on behalf of John J. Carty, chief engineer of the American Telephone & Telegraph company, at the company's offices here. Later Mr. Carty telephoned from Chicago, confirming the announcement.

To B. B. Webb, a telephone engineer fell the honor of being the first man to span with his voice the space be-tween the old world and the new. Sit-

Enemy—British Minister Tells

of Last Visit to Prisoner.

London.—The British foreign office made public Saturday the report of Rev. H. S. T. Gahan, the British chaplain in Brussels, who visited Miss Edith Cayell just before her execusive for the navy at Arlington, Va., Mr. Webb, shortly after midnight, asked the wireless telegraph operator to signal Eiffel tower in Paris.

The wireless snapped out the signal and soon there came back a response.

Awaiting word from Mr. Webb at the Paris end of the wireless radiation were H. E. Shreeve and A. M. Curtis, other engineers, and a group of other engineers, and a group of French officers, listening with espe-

When the expected message came it was addressed to the company here, and said that Webb's "Hellos" and "Goodbyes" had been distinctly heard by the engineers and French army officers in Paris, and that portions of his test figures had also been picked up. At about the same time there came a message from Honolulu, saycame a message from Honolulu, saying that Webb's talk had been under stood in full by the receiving engineer there, and that even the voice had been recognized as Webb's.

Northwest Manufactures and Land **Products Show Is Scoring Success**

Portland.—The Second Annual Man-ufacturers' & Land Products Show opened Monday, October 25, and the great industrial and land exhibition will be in progress until midnight, No-vember 13.

will be in progress until midnight, November 13.

This is the greatest exposition of the kind the Northwest has ever seen and twenty-three Oregon counties have attractive displays of fruits, grains, grasses and vegetables. The agricultural and horticultural display is equal to the Lewis & Clarke Fair, of 1905.

More than 200 exhibitors have par in the big exposition and 75,000 square feet of space is occupied by displays of Oregon manufacturers and jobbers and retailers from over the country. The exposition was open to Oregon, Washington, Idaho and the Northwest in general. Clarke county, Washington, has an attractive display and

there are many exhibits of apples, pears, potatoes, onions and nuts. Life and action prevail at the exposition and working exhibits and interesting models are many.
All steam and electric lines serving

nunities

Employers Endorse Military Training. Washington, D. C.—Indorsements of contract. Experience in Europe teaches the administration's plan to create a great continental army for defense are private manufacturers for projectiles. realize that patriotism is not enough. beginning to reach Washington from lf congress approves, we will erect a large of anyone. It was learned that approving large product of 14-inch armor-pierceletters had been received from several such concernrs, and that at least one tiles. This will insure better shells had expressed willingness to grant its and better competition." such concernrs, and that at least one leave on full pay for services in

the proposed organization. One of the companies heard from wrote that it would gladly grant leave with pay to any of its men desiring to enlist, not only for reasons of patriot sm, but because it was regarded as a good business proposition to permit the men to take advantage of an op-

Thousands Cheer Kaiser.

Berlin, by wireless to Sayville.-All commander issued no statement as the churches of Berlin held services in commemoration of the 500th anniversary of the establishment of Hosuited when General Calles sent a versary of the establishment of Hotrain toward Fronteras to meet 150 henzollern rule over Brandenburg. The service in the cathedral was attended by Emperor William, Empress Augusta Victoria, Chancellor von Bethmann-Hollweg, many generals and admirals and the diplomatic corps, including the American ambassador. The streets outside the cathedral were

> Power Sharing Succeeds. Philadelphia.-The sharing of authority of employers with employes as an aid to the safeguarding of work in industrial establishments was commended by members of the National Safety Council at its session here. Inspection committees of workmen em-powered to rectify dangerous condi-tions have proved a success in the west and are being experimented with in the east. R. W. Campbell, of the Illinois Steel company, declared the

the Panama-Pacific exposition cattle show. Pearl beat Mohican's 38, owned Chicago.—The 12 words proposed by E. L. Brewer, of Satsop, Wash., by by the Simplified Spelling Board, by E. L. Brewer, of Satsop, Wash., by by the Simplified Spelling Board, two-tenths of one per cent. Judgment its efforts to accustom the general public to the use of simplified spelling board, and their verified milk recognitions are independently to the second seco ing, were indorsed by the Illinois Daily Newspaper association in a comnation to its members throughout

The words approved are: Tho, al-tho, thru, thruout, thoro, thoroly, thor-ofare, program, prolog, catalog, deca-log and pedagog.

only legal tender of the republic. The cordoba, the new monetary unit of Nicaragus, is of the same weight and fineness as the gold dollar of the United States. It was announced recently that the final rate of exchange agreed on was 12½ pesos of the old currency for one cordoba.

Jews Brave in Battle.

Berlin, by wireless to Sayville, N. J.

—Two hundred and eighty-six Jews in the German army have been promoted to be officers. Four thousand Jewish soldiers in the army have been decorted by Dr. Pope caused Horner to hold his breath 10 minutes and 10 seconds. Berkeley, Cal.-What is said to b

OWN MUNITIONS

Announcement that the human voice Federal Yards Will Compete to Stop Excessive Profits.

NO INTENTION TO MONOPOLIZE WORK

Secretary States Auxiliaries Manned and Supplied by Americans Are Necessary to Good Navy.

Raleigh, N. C.—Secretary Daniels in a speech at the North Carolina State. Fair said that the administration proposed to equip its shipyards and arsenals so they could compete with private plants under the national defense program. No monopoly was intended, he said, but this measure would be adopted as a check against excessive profits for private manufacturers.

adopted as a check against excessive profits for private manufacturers.

"The government has invested many millions of dollars in navy-yards," said the secretary, "and unless this investment is utilized for new construction, much of it is wasted. If the government is prepared to construct naval craft, private shipbuilding companies in making contracts must compete

MRS. NORMAN GALT



Mrs. Norman Galt is the wealthy ridow who is to become the wife of President Wilson. She is a South erner and has lived in Washington nearly all her life.

to secure competitive prices and pre-vent combinations among private cor-porations to charge higher prices than

ornditions justify."

Mr. Daniels said that the government paid 80 cents a pound to a government manufacturer a few years ago to make powder, but the navy was now making it at a cost of about 25 cents a pound. Torpedoes and mines, he said, were also being manufactured by the government at a great saving of

noney.
"It has been ascertained by a special facture armor plate for \$230 to \$260, as against the non-competitive prices of \$425 to \$486 a ton charged in the last ing shells, as well as smaller project

The secretary particularly directed attention to the lack of ships in the American merchant marine to carry

it and are willing to pay for it. "What the navy needs, and in case of trouble would need sorely," he added, "are auxiliaries properly built and equipped with trained Americans. A tween the advance guard of General portunity to spend two months in vig-villa's soldiers and a detachment of orous camp life with military training. is not an American need, either for is not an American need, either for commerce or for defense."

Honorary Degrees Given.

Washington, D. C .- Nearly 200 new thirty-third degree honorary members were elected by the supreme council of the Scottish Rite of the southern jurisdiction of the United States, in as those current for the past week session in the newly dedicated Mason. or more, Louis Lachmund purchased ic temple here. Practically all of the southern and western states, the Dis-trict of Columbia, the army and navy, the Philippines and Porto Rico were represented in the list of those ele It is expected that several active thirty-third degree members named later in the week.

Yale Bars Club Drinking. New Haven, Conn.-Notices have graduates belong, informing them that after November 1 they will not be allowed to serve liquor in their club, society or "frat" house. The faculty order is expected to put an end to social drinking of undergraduates. A new state law provides that all clubs and similar organizations which wish to serve liquor must secure a special license.

Swiss Protest to Berlin.

Berne, Switzerland, via Paris.-The Swiss government has instructed its ic protest against the new violation of Swiss territory by German aviators. The protest is occasioned by the act of an aviator in dropping eight bombs over Chaux de Fonds Sunday, causing the injury of four persons and considerable damage to property. Switzer-land demands compensation and the punishment of the aviator.

Jews Brave in Battle.

NORTHWEST MARKET REPORTS; GENERAL CROP CONDITIONS

PORTLAND MARKETS. sat—Bluestem, 984c; fortyfold, 98c 954c; red fife, 924c; red Russian ats-No. 1 white, feed, \$24.75, arley-No. 1 feed, \$26.75; brewing,

ozen; tomatoes, 25@30c per box; cat uge, le per pound; garlie, 15c per pound; popers, 495c per pound; eggplant, 49f er pound; sprouts, 8@10c per pound; corseratish, 10c per pound; cauliflowe uge \$1.25; Lima beans, 8@9c; celery, 60 Green Fruits—Peaches, 40@50c per box; watermelons, 1611% per pound; apples, 75c@\$1.75 per box; pears, \$1@125 per box; grapes, \$5c@\$1.50 per crate; casabas, 1%c per pound; cranberries, \$9.50@10 per barrel.

Potatoes—Oregon, \$5.000.

bas, 1½c per pound; cranberries, \$5.50p 10 per barrel.

Potatoes—Oregon, 85.990c; Yakima, \$1 per sack; sweets, \$1.9092 per hundred.
Onions—Oregon, \$1.35 per sack.
Esgs—Oregon ranch, buying prices: No. 1, 36c; No. 2, 27c; No. 3, 20c per dozen.
Jobbing prices: No. 1, 38.940c.
Poultry—Hens, 13.914c; Springs, 13½.69 14c; turkeys, 179.18c; ducks, white, 13.91 16c; colored, 10.911c; geese, \$8.910c.
Butter—City creamery cubes, extras, selling at 31½c; firsts, 29c; prints and cartons, extra. Prices paid to producers: Country creamery, 22.929c; according to quality; butterfat, premium quality, 35c; No. 1 average quality, 31c; No. 2, 25c.
Veal—Fancy, 10.910½c per pound.
Hops—1915 crop, \$9.91c per pound.
Hides—Salted hides 15c; salted kip, 15c; salted calf, 18c; green hides, 13½c; green kip, 15c; green calf, 18c; dry hides, 25c; dry calf, 27c.
Wool—Eastern Oregon, 18.928c; Valley, 37.938c; Fall lambs wool, 21.935c.
Mohair—Oregon, 27.938c per pound.
Cascara Bark—Old and new, 3½.94c per pound.
Pelts—Dry long-wooled pelts, 15½c;

per pound.

Pelts—Dry long-wooled pelts, 15%c; dry short-wooled pelts, 11%c; dry shear-lings, 10%15c each; salted shearlings, 15% 25c each; dry goat, long hair, 13c each; dry goat shearlings, 10%20c each; salted long-wooled pelts, September, 75c%41.25 each. each.

Cattle—Choice steers, \$6.50@7; medium steers, \$5.25@6.75; choice cows, \$5@5.50; good cows, \$4.50@4.75; medium cows, \$2.75@4.25; heifers, \$3.50@6; buils, \$3@4.50; stags, \$4.50@5.26.

Hogs—Light, \$6.75@7.10; heavy, \$5.75@

Wheat—Bluestem, 98c; Turkey red, 98c; fortyfold, 97c; club, 96c; fife, 93c; red Russian, 91c. Barley, \$26,50. Yesterday's car receipts: Wheat, 103; oats, 6; barley, 29; hay, 49; flour, 6. TACOMA MARKETS.

Wheat—Bluestem, 99c; fortyfold, 95c; club, 95c; red fife, 92c. Flour advanced 20c a barrel. Car receipts: Wheat, 85; barley, 5; corn, 1; cata, 2; hay, 19. Butter—Washington creamery, 32@33c; Oregon, 30@31c. Cheese—Limburger, 20c; block Swiss, 30@21c; Tillamook, 15c; Washington, 15c; cream brick, 15@20c. Eggs—Fresh ranch, 47@50c; cold storage, 27@25c dozen.

Portland.-Dollar wheat was again n evidence in the local market. Ten ousand bushels of November bluestem changed hands at the Merchants' Exchange at this price. Another sale tissue. of 10,000 bushels of bluestem for this

posted. Country dealing at about the same basis or higher has been reported for several days. One lot was bought in Eastern Oregon, a special transaction, at equal to \$1.02.

By consistently holding out for higher prices the farmers of the Northwest have succeeded in forcing the market up 8 to 10 cents a bushel since the first of the month, and this in the face of a steadily rising freight market. The last steamer reported taken was at 100s, but it is stated that owners are now asking, with the Canal closed, 120 to 125s. Exporters continue to buy, however, and they are compelled to pay the prices farmers demand.

The bluestem purchases at the External puddings, icing for cakes, stee. This is made by cooking the sugar in a pan until it browns nicely or makes caramei. This may be made into a sirup by the addition of water and bottled for future use.

Baked Ham and Sweet Potatoes.

A delicious meat dish can be made by baking ham and sweet poatoes to gether. Grease the bottom of a round baking dish, and place a silce of ham, about one-half inch thick, in it. Pepper the ham and sprinkle a few cloves over the meat. Then spread mashed sweet potatoes over meat, about an inch and a half in thickness. Put but-

changed. December offers, which slice of ham. Bake in a rather hot were too low when first posted on oven for half an hour, or until the meat is tender. Serve hot, meat and potatoes together. This is an excellent dish for late summer and fall—cents lower to 25 cents higher.

cents lower to 25 cents higher Patent flour was still available at the former price, but the market was firm. The export market was reported

Reviewing conditions in the Euroto American advance and heavy Con-tinental takings, but the advance is big American crops and strong

Northwestern Hops in Demand.

Portland.-About 1000 bales of hops were bought in the Northwest Wednesday. All the details of the transactions were not available, but it is understood the prices were the same 300 bales more of the McLoughlin crop at Independence. The McKay lot of 180 bales at St. Paul was also sold. Two lots of Western Washingtons, those of George Richter and Fremont Annis, were disposed of. Yakima sales included the Stewart crop of 125 bales and the Slavin lot of 75 bales.

Lewiston, Idaho.-The bean crop o New Haven, Conn.—Notices have been sent out by the Yale faculty to all clubs, secret societies and "frat" organizations to which Yale undergraduates belong, informing them that after November 1 they will not be allowed to serve liquor in their club, society or "frat" house. The faculty society or "frat" house.

Genesee, Idaho.-The potato crop in this section is light this year and the quality of the potatoes is not the best. Swiss government has instructed its This is the shortest crop this section embassy at Berlin to lodge an energet ic protest against the new violation of Swiss territory by German aviators. few days, selling around 83 cents a bushel. The Farmers' Union ware-house is shipping quantities of hogs. The prices are better than they have been for some time, the last shipment being around 6 cents.

Huckleberries Drug on Market. Portland.—Southern Oregon grapes were in larger supply this week. ments of good Tokays, which brought 90 cents to \$1 a crate. Concords were scarce and sold at 15 cents. California grapes were unchanged.

Huckleberries continue more or less of a drug on the market, and though quoted at \$455 cents, are hard to move. other meat.

HINTS FOR THE COOK

SOME BETTER WAYS OF DOING KITCHEN WORK.

How To Do Away With Lumps In Making Cocoa-To Keep Rice and Macaroni From Becoming Mushy.

Instead of mixing cocoa with boiling water to dissolve it before putting it into the cocoa pot, try mixing the dry cocoa with an equal amount of granulated sugar and then pouring it into the boiling water in the pot, stirring all the while. This does away with the lumps that usually have to be fussed over, and also a mussy cup.

The kettle should be given frequen aths, else lime and other salts will settle on the bottom, which may then be dissolved off into the boiling water, making it "hard." To heat water very quickly set a

broad, flat saucepan over the fire and cover to keep in steam. A small zinc-covered board, about the size of a rolling board for pas-try, is invaluable for setting hot dishes, pots, etc., upon. This preserves the kitchen table top, and leaves room

on the stove for other things. To prevent a roast from becoming fat soaked, set it upon a rack in the of the roasting pan covered with fat are unquestionably expensive to con-to prevent it from burning. Fat is struct and the effort to reduce the may make a satisfactory base. For utterly changes the character of the inferior construction and consequent

Cold meats may be attractively served by removing first all gristle, pends so much upon so many variable much as in the case of first-class ones and skin and excess fat and then cutting into thin strips or slivers. Warm indirectly by pouring over the kiln that it is not possible to make of 1 part Portland cement, 3 parts of meat any desired hot sauce.

should be cooked same as rice.

To soften hard tissue of dried vegetables like peas, beans and lentils, lowing formula as a rough guide for cook in soft water. Otherwise add baking soda to ordinary water in the proportion of one teaspoonful to two and suitable grades: Cost per square quarts of water.

If string beans are not freshly gath-ered from the garden, it will improve them to prepare them for cooking. cement per barrel, S equals then let them stand for an hour or sand per cubic yard, A equals cost of more in cold water before applying coarse aggregate per cubic yard, B

should be soaked overnight in cold Thus, if labor costs 25 cents an hour, water before cooking, so as to 'plump" them and soften the dried

Try "caramel sugar" as a dressing month's delivery at 99% cents was for mush, griddle cakes, sauces for posted. Country dealing at about the puddings, icing for cakes, etc. This caramel. This may be made into a should be allowed for wear on tools monolith. Before the grout is ap-sirup by the addition of water and and machinery, and for every inch sub-bottled for future use.

"It has been ascertained by a special mmission that the navy," he contind, "with a modern plant, can manu-

The juice and grated rind of one emon, one cupful of sugar, the yolks of two eggs, three well-rounded tablean wheat markets, Broomhall says: spoonfuls of flour, one pint of milk.
"Strength in wheat is due entirely Mix the flour and part of the milk to a smooth paste, add the lemon, sugar, sidered extraordinary in the face yolks of eggs well beaten and rest of milk. Line baking dish with rich pastry rolled about one-quarter inch freights. Importers are obliged to pay pastry rolled about one-quarter inch unexpected prices and it is feared that thick. Bake in good oven. Beat whites this advance will continue, or at least to a stiff froth, add two tablespoonfuls as long as Continental buyers follow of sugar, spread over the top return to oven to brown. Serve cold.

Remove the skins of the grapes, put the pulp in a stewpan and bring it to the boiling point; let it simmer for five minutes; force it through a strainer to remove the seeds and add the skins to the pulp. There should be one and one-half cupfuls. Mix two cupfuls of sugar, a few grains of salt and two tablespoonfuls of flour. When blended thoroughly add two eggs well beaten and one tablespoonful of melted butter. Put between crusts and bake.

Pickled Walnuts.

Wipe 100 walnuts, prick with a large needle and put them in a jar, sprinkling as you lay them in with the fol lowing spices, mixed: Cloves, allpice, nutmeg, whole pepper and sliced ginger, of each an ounce; onehalf pint mustard seed, four cloves of garlic and a stick of horse radish. Then add two tablespoonfuls of salt and sufficient bolling vinegar to cover the whole. Cover the jar and tie closely.-Mother's Magazine.

Select firm, good peaches. Rub care fully to remove fuzz. Beat the whites of six eggs, with a scant cupful of water. Dip the peaches in this, then roll in powdered sugar, lay on paper in sun to dry. Repeat until there is thick coating of the sugar around the each. If entirely covered, these will keep for a long time, and this is a favorite English method of preparing

Mint Leaves in Plum Jelly. This year when you are making plum jelly, try this plan: Get some fresh mint, and while the

elly is cooking, add some of the mitit eaves to if. Pour the jelly into the glasses so that a few leaves are in The mint gives a flavor and cially delicious with roast lamb or

BRICK ROADS ARE EASILY MAINTAINED



Vitrified brick roads, according to | considers that the ability of pavement the road specialists of the department of agriculture, possess three distinct advantages. First, they are durable under all traffic conditions; second, they afford easy traction and moderately good foothold for horses; and the surface. Where the traffic is comfat soaked, set it upon a rack in the third, they are easy to maintain and roasting pan. But keep the surface keep clean. On the other hand, they better used here than water, as water high first cost frequently results in heavier traffic or where the material

defects. The cost of a brick pavement de- The stone base should be constructed factors such as the locality, freight rates and the distance from brick any definite estimates. The cost of sand and from 5 to 7 parts of broken To keep every grain of rice separate the rough grading, however, should stone or screened gravel. Above the 6.10.

Sheep—Wethers, \$4.75@6.25; ewes, \$4@ and distinct, cook it in a pot of rapidbe considered entirely apart from the
ly boiling water with the lid off.

SEATTLE MARKETS.

Cooked in a double boiler with the lid would have to be done no matter what on makes the rice mushy. Macaroni kind of a road was to be built. Excluding this item, the bulletin already mentioned (No. 246) furnishes the folyard equals 1.90-L, plus .213-C, plus

coarse aggregate per cubic yard, B squals cost of paving brick per 1,000, Dried apples, apricots, prunes, etc., and L equals cost of labor per hour. the labor cost per square yard of or 47.50 cents. The cost of the cement the foundation there will be a corre- sprinkling during the application,

paratively light and the subgrade composed of material that does not readily absorb water, broken stone composing the subgrade is at all un-stable a concrete base is necessary concrete base a sand cushion to correct slight irregularities and to secure an even surface for the brick is most desirable. This cushion is usually two inches thick, though in some

two inches thick, though in some cases it may be only 1\(\frac{1}{2}\). It is important to have the sand clesn and dry. After the brick has been laid upon this cushion and the pavement gone over carefully to remedy all defects and remove all imperfect material, it In this fomula C equals cost of roller, gone over carefully once more, cement per barrel, S equals cost of and the joints then filled with some material to prevent the brick edges from chipping. Of the various materials used for this purpose a grout made of equal portions of Portland ce-ment and sand mixed with water is recommended. Sand alone is somebut it is open to several obj per square yard will be .213 times the and its use in the end is probably not price of a barrel and so on with the economical. Portland cement grout, other items. It is assumed in this on the other hand, binds the individformula that all materials are deliv- ual bricks together and converts the ered on the work. About 10 per cent pavement into what is practically a



Vitrified Brick Pavements for Country Roads-Filling the Joints, First Coat.

ner souare vard.

Paving bricks should be uniform in size, reasonably perfect in shape, tough in order to resist crushing, hard in order to resist abrasion, and uni- pavements with a one-inch layer of formly graded in order that the pavement may wear evenly.

A more important test is known as the rattler or abrasion test. In this grout is hardening, the bricks are subjected to destructive influences similar to those encoun tered in actual service, and the effects it is extremely noisy-may be overresemble those which traffic may be expected to produce upon the completed pavement. Briefly the test consists of inclosing 10 dried bricks in a are steel barrel in which there are also placed a number of cast-iron spheres. Ten of these spheres weigh each 71/2 pounds. Enough smaller ones weigh ing a little less than a pound are added to make the total weight approximately 300 pounds. The barrel is then revolved at the rate of 30 revoluctions a minute for an hour. At the end of that time the bricks are taken out and weighed, and their loss in weight ascertained. In this test good Chicks Too Small for Market, of Slow paving brick will lose from 18 to 24

per cent of its weight. Equally important with the character of the brick is the character of the roadhed on which it is to be laid. The four essentials for the roadbed are thorough drainage, firmness, uniformity in grade and cross section, and adequate shoulders. Where the first can be obtained in no other way it may be necessary to lift the road considerably above the surrounding land Firmness is secured, if the road has been properly drained, by making certain that the roadbed is thoroughly compact. The subgrade must be repeatedly rolled and reshaped until the

desired grade is secured. Strong, desirable curbing is neces sary for all brick pavements in order to prevent the marginal brick from be

ing over the entire pavement. a brick pavement is a firm foundation upon which to lay the brick. The importance of this is evident when one disease.

monding difference of 8 to 12 cents | which there should be two. At the end of the second application the grout should completely fill the joints flush with the tops of the joints. The final step is to cover the completed

fine earth. This is done to protect the

pavement from the weather and to keep it in a moist condition while the The objection frequently made to the grout-filled brick pavement-that come by the proper use of longitudinal expansion cushions placed alongside the curb. These expansion cushions bituminous layers from onehalf to one and one-quarter inches thick, varying with the width of the

pavement. In addition to the description of the various problems the new bulletin contains in an appendix complete typical specifications for the construction

of a brick road. TEST FOR WHITE DIARRHEA

Growth and Feathering Might Well Be Killed Off.

If you have chicks now coming on old enough to be on the market, and yet too small for such purpose, runts of slow growth and slow feathering, you might just as well kill them off and not hope they will yet take a start, for no doubt but they are carrying the germs of bacillary white diarrhea. Not all by any means that take this disease show the bowel

looseness. Flocks suspected of having mem bers in it infected with this disease are now being tested for it by the Connecticut agricultural college. The testing is done by a little blood being drawn from a vein in one wing of each fowl. This blood is mixed with coming displaced, which event would a serum to be put by for a few days, result in deterioration, finally spread. The mixture is labeled, and the fowl is given same label. In a few days One of the most essential factors of brick pavement is a firm foundation brick pavement is a firm foundation scope, tells whether this serum and blood mixture shows any trace of the