

## THE HISTORIC SHENANDOAH VALLEY.

Work of the United States Department of Agriculture.

GUY ELLIOTT MITCHELL.

The famous Shenandoah Valley is one of the best farming sections of Virginia, and I had the pleasure recently of taking a trip, in company with my father, down to its lower end at Harrisburg, probably 140 miles south of Washington. The valley was the scene of many hard fought skirmishes and battles in the late civil war between Sheridan and Early, and we touched at the point where Sheridan made his famous ride to Winchester and turned back the victorious troops of Early. I have more than once heard my uncle, who was a captain in the 128th Illinois under Sheridan, relate how after working all night making up his company's pay rolls, he had turned out of his tent just in time to see Sheridan riding by on his black charger, swinging his saber, swearing like the typical cavalryman that he was, and shouting to the boys, "turn back, we've got them

will give 50 and 60 bushels. I noticed large areas of poorly cared for corn which would not make half a crop, even where the land was apparently fairly good.

It seems singular that so many farmers, not only in Virginia, but in every State, will plough a field, harrow it, fertilize it, and lay it off and plant it, cultivate it once or twice and then through neglect to give it two or more cultivations at the proper time reduce their yield from 20 to 40 per cent. I noticed many corn fields on this trip, and they can be seen in every farming district in Virginia—where the corn had gotten a good start and grown well, up to its first cultivation; then work had ceased on it and the weeds and grasses were gathering as much fertility as the corn itself.

Corn in Virginia appears to be the favorite crop for planting in young orchards. It is, in fact, believed by



licked." A great fighter too, was Early, who was said never to know that he was whipped.

This part of Virginia is full of landmarks of the great civil strife. Many old-fashioned houses, with their great outside stone chimneys, tell their own tales of antebellum days when tobacco was king in Virginia, and when peace reigned in the great state which was the Mother of Presidents. Peace again prevails over Virginia and she is now taking on a second prosperity. The Shenandoah Valley, as a whole, is rich in agriculture; it has also many stone quarries and some manufacturing. Few prettier places could be found to live in than the country around Harrisburg.

**Nesting Among the Mountains.**  
The valley nestles between the Manassas spur of mountains to the west and the Blue Ridge of the Alleghenies to the east. It grows great quantities of corn and wheat; some sheep and cattle are raised and considerable fruit. "The horticultural possibilities of this section of Virginia are wonderful," said one of the fruit men of the Department of Agriculture to me, recently. "Old Virginia will yet wake up some day. The main stay of the country, however, now, is the trinity of wheat, corn and grass (timothy and clover). One feature of the trip was a Pekin duck farm with 25,000 birds, which produced, it is claimed, \$16,000 last year. But corn and wheat are the principal money crops. Wheat costs about 70 or 75 cents a bushel to raise. This includes seeding the field with timothy and clover and consequently a stand of pasture land, which gets its start from the fertilizer for the wheat crop. So that if a farmer gets 75 cents



RUSSIAN SUNFLOWER VIRGINIA. TWELVE INCH HEAD.

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a bushel for his wheat, he comes out whole and is getting his grass and clover without cost. This rotation of crops and the plowing under of the clover the second year keeps the land fertile and improved.

### Money in Well Tended Corn.

Corn, well planted and cultivated, is a good money crop in Virginia and is almost necessary to a proper rotation. The average of the Virginia crop is \$11.55 per acre; in Illinois, which has much richer soil, the value is \$11.59 and much of the corn yield in Virginia is pitifully small. There are thousands of acres of worn-out lands yielding no higher than 20 or 15 or even 10 bushels to the acre. The Shenandoah Valley farmers all say that their good bottom lands, and even some of the uplands,

many farmers and fruit growers to be the best orchard crop.

It seemed to me that there must be much pleasure in getting up in the early morning and looking over toward a range of mountains with their summits in the clouds and the mists rising from smoke. As the sun breaks over the crests the clouds are dispersed and it is then time for breakfast.

### Bureau of Animal Industry.

Dr. D. E. Salmon, who has recently resigned as chief of the Bureau of Animal Industry of the Department of Agriculture, has held that position for over twenty years and has done some of the best work which has been accomplished in that department. Under his direction and supervision the system of inspection of slaughtered meats intended for interstate shipment and export has been brought to a high state of perfection until American meats which are received abroad with the official tag from the Bureau of Animal Industry are assured as good.

The integrity of the American merchant or shipper may be as high as that of the merchants of any other nation, but it is nevertheless a fact that without some such supervisory action on the part of the government, the foreign market would soon be completely killed by unscrupulous dealers, and it is believed that the inspection system of the department has done and is doing more to build up American trade abroad for agricultural products than any other work.

### Inspection of Dairy Products.

A very important branch of the Bureau of Animal Industry is the dairy division, and of late years government inspection and regulation, to some extent, has been extended to dairy products. Congress recently passed a law authorizing the Department to inspect butter shipped abroad, and further to supervise and practically compel creameries and renovated butter establishments to adopt clean and sanitary methods.

Dr. Salmon resigned, presumably, on account of the charges made against him by reason of his connection with a private corporation supplying tags and labels to the bureau of which he was chief. After an exhaustive investigation by the Department of Justice, Secretary Wilson exonerated Dr. Salmon from any wrong doing in this connection, but either he himself desired to sever his connection with the government, or it was thought advisable to appoint a new man not connected with such charges.

Dr. A. D. Melvin, an assistant in the bureau, has been placed in charge and may become the permanent chief.

### Free Farm Bulletin.

The Department of Agriculture has just printed a small bulletin which will be sent free to any farmers applying for it. It outlines the results of a number of farmer's experiments made at the various State Experiment Stations in cooperation with the Department at Washington. It includes such questions as the top dressing of grass land, peanuts as forage crops, winter killing of fruit trees; cranberry culture limo-sulphur-salt wash for scale insects; clean milk; poultry houses, etc. The bulletin is one of a series known as "Experiment Station Work." Four or five of these particular bulletins are issued by the Department during the course of each year, each one containing from six to a dozen short articles on practical farm matters. These publications are of the most popular and useful little documents issued by the Depart-

ment. The one referred to is No. 227 and can be had upon application to members of Congress, or Senators, or to the Secretary of Agriculture.

### Orange Tree Foe.

The Department of Agriculture has received a report from an agent in Mexico stating that in six and perhaps more states in Mexico he has found traces of the orange maggot, which is a dreaded foe of oranges, and it is feared that this condition might permit of its entry into California.

The Mexicans in attempting to eradicate the maggot have destroyed thousands of orange and mango trees. The multiplication of the orange maggot is said to be something enormous.

### Japanese Paper Plant.

Secretary Wilson's men are working to introduce a sort of vegetable leather. It is in reality a paper plant, as much so as the papyrus plant of ancient Egypt, but its uses are manifold, ranging all the way from dainty note paper to water-proof garments—and which are really water-proof under the severest tests—and leather pocketbooks which outwear real leather. The plant is a pretty little shrub called in Japanese "mitsumata," and it is its inner bark which is converted to use. The plant grows in the mountains of Japan, and Explorer Fairchild, of the Department of Agriculture, believes that it will thrive over a large part of the Appalachian range and other similar sections of the United States.

In Japan pipe cases and tobacco pouches are manufactured from the material, as well as a kind of wall paper, which is already becoming fashionable in America. Such wall papers of vegetable leather are turned out in beautiful designs for wall and ceiling decorations, being stamped and modeled by hand in the most artistic patterns. It would seem that Americans have a great deal to learn from the Japanese about paper-making. Already large quantities of another kind of paper obtained from the same plant are imported for use as legal documents, diplomas, deeds and bonds. There are at least eight other plants from which the subjects of the Mitsumata obtain paper stuff, while this country develops for such material upon linen. Mr. Fairchild, who has made a special study of this subject, says that it is not pleasant to think that the brilliant white note paper which a woman uses may have in it part of the filthy garment of some Egyptian fellow saved by a rapscallion from the gutter, yet it is a fact that hundreds of tons of Egyptian rags are fetched every year to the United States to supply the paper mills. At Mannheim on the Rhine the American importers have rag-picking houses, where rags are collected from all over Europe (the disease infected levant not excepted), and where women and children work with wet sponges tied over their mouths sorting the filthy scraps for shipment to New York. The best papers are made of these vile rags.

Papers made from the inner bark of plants, like the "mitsumata," are a creation of the Orient. They are softer, silkier, tougher and lighter than American-made papers. If wet they lose their strength, like tissue paper, but on drying regain it.

### JAPANESE TEACH RUSSIANS.

Remarkable Incidents Connected

War and peace are strange bedfellows, for over in Japan, the land of the rising sun, the Japanese readily mixed the two arts in a fashion totally unexpected. The Japs had corralled at Himeju somewhere in the neighborhood of 75,000 Russian prisoners, mostly from Port Arthur, probably 70,000 of whom were illiterate. A well-known writer in commenting on the success of the Japanese arms brings out into the light the secret of Japan's strength. It is in just one thing, the men have mental as well as physical training. The majority of Jap soldiers have received education in



RUSSIAN PRISONERS WRITE RUSSIAN UNDER JAPANESE TEACHERS. JAPANESE PRISONERS AT WORK. Courtesy Harper's Weekly.

some form, and with the desire to enlighten the Russian prisoners, the government of Japan established in the prison at Himeju a school wherein was taught to the illiterate Russians their own language. Strange as this may seem this fact has been brought out by a short article in the Japan Daily Times in which appears the statement: "Thanks to the teaching, those soldiers who were totally illiterate are now able to write letters to their homes. It is stated that the authorities of the quarters received inquiries from Russia asking if the letters were really written by the senders."

### Credit Due Japan.

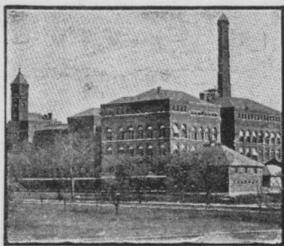
This, one of the most unusual events ever produced by war, is as much to Japan's credit, as it is valuable to the poor Russian peasantry. The Kobe Daily News has been issuing an illustrated weekly for the Russian prisoners. The first issue of the sheet called "Japan and Russia" contained over twenty excellent photographic illustrations. This paper in introducing itself stated that its object was "to keep the 70,000 Russian prisoners now in this country informed about the general situation at the front and the attitude of the various powers in connection with the war, as well as to acquaint the prisoners with the

### NEW MONEY NEEDED.

The Government Cannot Print It Rapidly Enough.

The great Bureau of Engraving and Printing at Washington has reached its limit, and new machines and additional workmen must be provided to turn out the money needed for the country.

"We are even now having much difficulty in keeping up with the demand for new money," said Charles H. Treat, the United States Treasurer, "and it is going to be difficult to supply the demands for the busy business season. Large amounts of old money are coming into the treasury for redemption, with the request that new money be issued in its place. The business of



WHERE THE MONEY IS ENGRAVED.

the country must have what it wants in the way of currency, and when this old money is sent in for redemption it is not wise to delay getting out the new money to replace it.

"The national banks of the country are increasing their circulation at a remarkable rate. During this last year this increase has been about \$60,000,000, and many of the banks have had to wait much longer than prudent to obtain their circulation. These delays tie up the circulating medium. There were recently 118 banks on the list waiting for new currency. This increased growth of the circulation outstanding of national banks represents the normal growth of the country."

Plans are being considered at Washington for the extension and enlargement of the Bureau of Engraving and Printing, where all of Uncle Sam's money is manufactured.

### Brieis From Everywhere

The honey bee is said to be the inveterate foe of the bumble bee and will kill him on slight provocation, and often without provocation at all.

There were imported into the United States for the last fiscal year 3,658,131.447 pounds of sugar.

The product of the poultry industry in the United States was worth last year \$280,000,000. The value of hog products was \$186,529,000.

Salt is a government monopoly in Italy, and people living on the seacoast are forbidden to evaporate sea water to obtain salt.

Iced whale was one of the delicacies served by the Emperor of Japan at his dinner to Secretary Taft and party.

Thomas Kilpatrick, who gave to New York its first apartment house, in 1853, was ridiculed as a man who built five houses, "one on top of the other."

The fact that malaria was caused by mosquitoes was known to Chinese physicians in the sixth century.

The harassed Sultan of Turkey never sleeps in a dark room. His chamber and the nearby apartments and gardens are brilliantly lighted all night. He is read to sleep each night, usually by his brother.

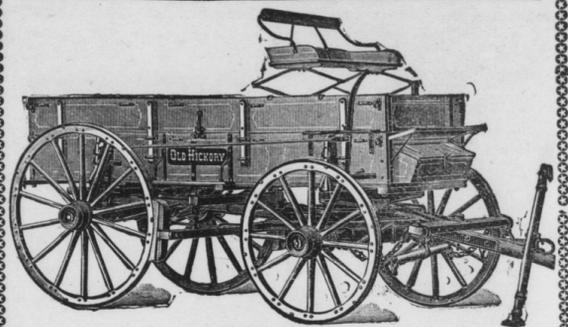
The Michigan Central Railroad will tunnel the Niagara River.

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