

MATERIALS FOR ROAD MAINTENANCE.

By W. S. PARKS,
Jasper County Highway Superintendent.

In order that you may get an idea of the extent of the operations in Jasper county where I am employed, I will give very briefly the road statistics of our county. We have 443 miles of stone and gravel roads that are maintained by the road superintendent—139 miles of gravel and 305 miles of stone. There are 108 bridges. Three of them span the Kankakee river, a distance of 170 to 180 feet; 7 are over the Iroquois river, a length of from 75 to 100 feet; 7 are over other small streams, 75 to 100 feet; 3 are 12 ft. span, and the other 88 will range from 20 to 75 feet.

The total amount of money available for road maintenance in 1923 was \$48,000, in round numbers. \$20,050.30 was spent for stone and gravel; \$3,164 for culverts; \$528.42 for tile; \$4,941 for concrete headers, etc., including labor and materials; \$3,600 for cleaning and painting the 108 bridges, including labor and material.

The kind of gravel I prefer for road maintenance is one which will not be coarser than one inch and have not more than 25% to 35% sand. Stone, about the same size, crusher run, I find the most successful.

I believe that spreading road materials over a road in a thin layer and repeating this often will get the best results. In the north end of our county, where the roadbed is of sand and muck, I find that one inch material is most satisfactory; while in the south end of the county, where the foundation is more firm, being a mixture of sandy loam and sandy clay, a three-quarter inch crusher run stone or pike gravel makes the best road. Both the stone and gravel should be relatively clean—that is, with very little dust or clay. Particularly, clay is unsatisfactory, except in small quantities when it would be permissible for quick binding. With the kind of materials described and plenty of dragging twice a week on main roads and once a week on side roads, our highways are kept in what we consider a good condition. During the spring breakup, three-quarter inch to one inch crushed rock or clean gravel is used to fill the worst places. These places are then marked and tilled during the following summer. This treatment usually prevents the trouble occurring again.