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RAIL-ROAD NEWS.

Illinois Central Railroad.

The Washington correspondent of the Baltimore Sun, under date of the 16th ult. says:—
The Attorney General, Mr. Crittenden, decided, on Saturday morning, upon the construction of the bill granting alternate sections of land to the Central Illinois Railroad. The Central Illinois Railroad Company are to have alternate sections of six miles on a line, they may draw from Chicago to Cairo, and if part of the land so located should already be settled or entered, then they are to have the privilege of selecting an equal amount anywhere within fifteen miles of the said line.

The iron for one hundred and twenty miles of the road is already purchased and imported, and so much of the road will be completed this year. Advertisements for proposals will be immediately issued; Chicago south, 120 miles; from Freeport to Dubuque; from La Salle, south 60 miles, and from Cairo, north. The road, when completed, will be the longest continuous road in the world, nearly double the length of that of St. Petersburg to Moscow, in Russia.

Muscogee Railroad—The Ladies.

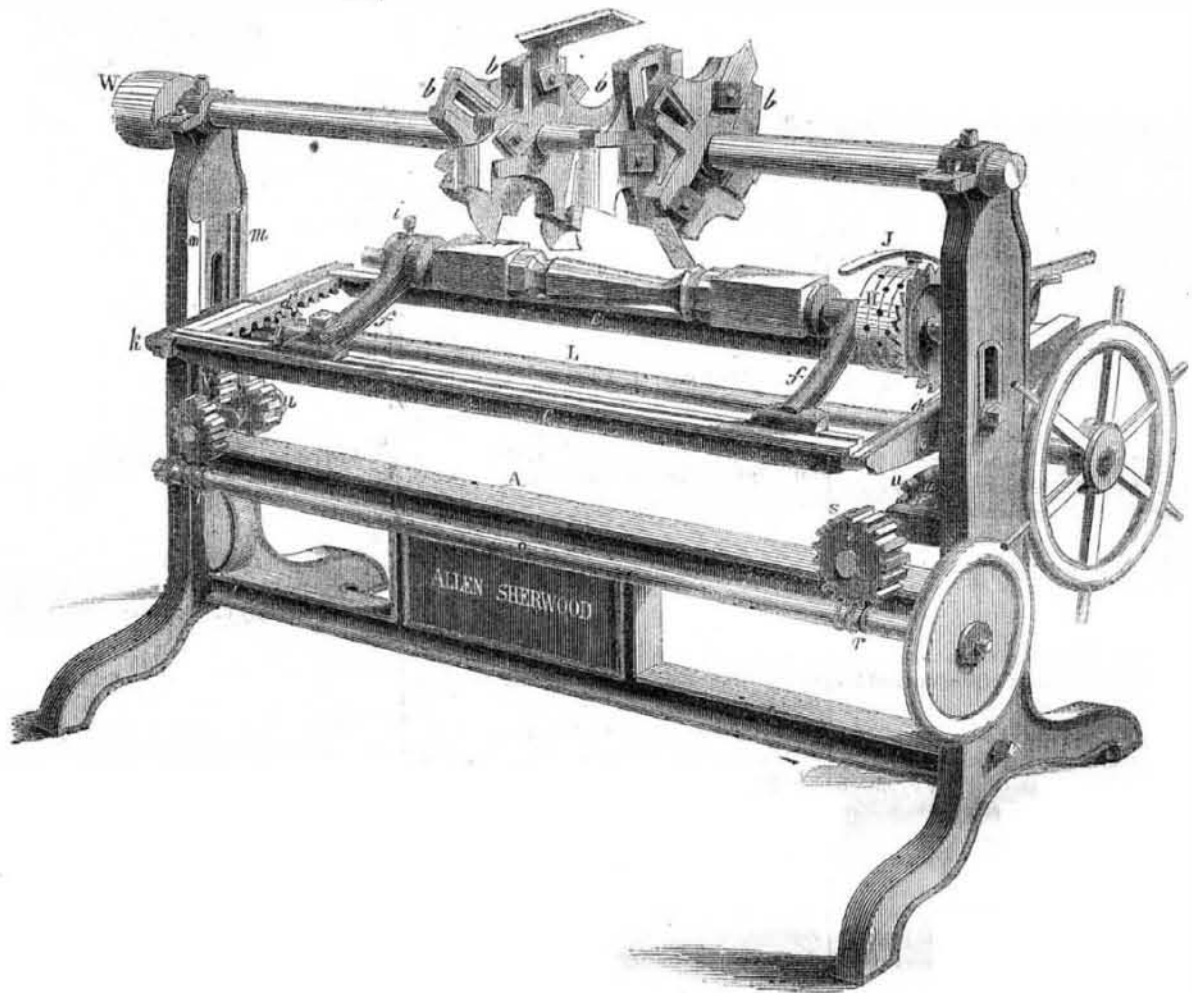
On the Muscogee Railroad—that part which has been finished—there are one passenger and one freight engine; one passenger, one baggage, and six platform cars. The passenger car was the gift of the ladies of Columbus. The place which enjoys the benefit of such mothers, wives, and sweethearts as Columbus, Ga., women so devoted to progress and improvement, cannot fail to stand high in intelligence and true worth. In many instances we have heard of ladies presenting banners, &c., but this is the only case with which we are acquainted where the ladies have so sensibly exhibited their feelings in respect to railroad improvements, by presenting a splendid passenger car to the company.

Defrauding Railroads.

A very important verdict was rendered recently in Jefferson county, N. Y. The defendant was on board the cars of the Hudson River Railroad Company during a serious collision, and professed to be very badly hurt by it; on the strength of which claim, the company allowed and paid him \$250 damages. Learning afterward that his pretence of injury was grossly exaggerated, if not wholly fraudulent, they traced him out and sued him, and have just recovered a verdict for the amount paid him, with costs. In their action in the premises, the company have subverted the cause of justice, and deserved especially well of all railroads.

A railway bridge is about to be thrown over the Vistula. It is to be 2,500 feet long and 63 feet wide, to rest on six piers, with a span of 500 feet between each. The lines will run along the sides of the bridge, leaving a road between them for carts, &c.

SHERWOOD'S PRISMATIC TURNING LATHE.—Fig. 1.



This lathe is for producing either irregular or symmetrical polygonic forms, and is peculiarly adapted to making bed-posts, newel posts, banisters, piano legs, and such articles. It is the invention of Allen Sherwood and Avery Babbit, and was secured to them by letters patent granted Jan. 13, 1852.

Figure 1, of the accompanying engravings, is a perspective view of the lathe; and figure 2 represents some specimens of work performed by it, which will give the reader an idea of its usefulness and of the variety of articles to the manufacture of which it is applicable.

The lathe consists in a carriage which resembles the bed and heads of an ordinary lathe, and a revolving cutter shaft carrying a series of cutters, which are of such form that the edge of each in rotating will describe a figure, the outline of which, in a plane pass-

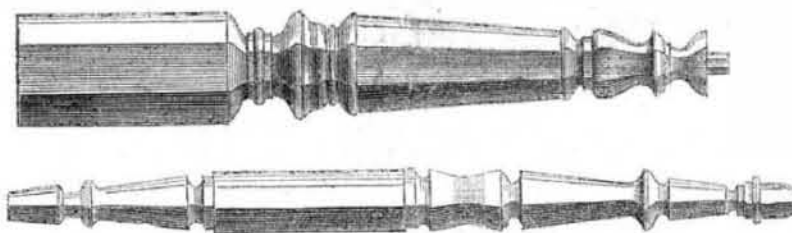
ing through its axis, is the counterpart of a corresponding line on the side of the required prism, so that the several figures generated by the cutters joined together will leave an outline in a plane taken through their axis the exact counterpart of one of the sides of the prism they are intended to produce. The carriage in which the block to be cut is placed holds it with its axis parallel to the axis of the cutter shaft, and admits of its being turned so as to present any of its sides to the action of the cutters, and also allows it to be moved in any direction transversely to the axis of the cutters.

A (Fig. 1) is the frame which carries all the working parts, consisting of two upright standards, each surmounted by a pillow block which forms one of the bearings of the cutter shaft. The latter carries a series of heads, *b*, having radial grooves in them in which the

is given by turning a spindle, *O*, which carries two endless screws, *r r*, which gear into worm wheels, *SS*, upon two short spindles, *t t*, which are fitted in bearings on the frame parallel with the ways. These spindles carry toothed pinions, *u u*, which gear into racks, *V*, attached to the ways and perpendicular to them. The carriage is moved upon the ways transversely to the axis of the cutters by turning a shaft, *L*, which carries pinions, *n n* gearing into toothed racks attached to the transverse bars, *d d*.

The operation is as follows:—The cutter shaft is furnished with a set of knives, which, in revolving, combine to describe a figure whose longitudinal profile is the counterpart of the longitudinal profile of the figure to be produced. The carriage is moved to one side of the machine by turning the shaft, *L*, and the block to be cut is placed between the centres; it is then brought to a suitable height or distance from the axis of the cutter shaft, *O*. The spring catch, *J*, is engaged in one notch in a circle of divisions on the cylinder, *H*, corresponding in number to the number of sides required to be given to the object, and a rapid rotary motion is given to the cutter shaft through a band which runs over the pulley, *W*. The operator then turns the shaft, *L*, in the proper direction to make the carriage and block pass transversely beneath the revolving cutter which cut away the block and leave a face whose transverse section at any point is parallel with the ways upon which the carriage travels, and whose longitudinal section or profile is the counterpart of that of the figure described by the revolution of the cutters. The carriage is now run back and the spring catch disengaged, the mandrel, *G*, is turned to bring the next notch to the catch, which is then re-engaged, and the carriage run again under the revolving cutters. The above operations are repeated until the required number of sides are given to the object.

Figure 2.



cutters are secured; the cutters will be of various forms according to the pattern to be produced. The feed carriage consists mainly of a frame, *c c, d d'*, which may be likened to the bed of a common lathe, carrying two heads, *f f'*, which are essentially the same as the heads of a common lathe, the head, *f*, carrying a mandrel, *G*, which turns in a suitable bearing, and carries a chuck or other contrivance for holding and turning the block, and the head, *f'*, carrying an adjustable mandrel similar to the back centre of a lathe. The centres of

the two heads are in line parallel with the axis of the cutter shaft. The mandrel, *G*, carries a cylinder, *H*, whose periphery is graduated into any required number of divisions, and a spring catch, *J*, is secured to the carriage to engage in the divisions of the cylinder and prevent it from turning.

The carriage rests upon parallel ways, *K K*, transverse to the axis of the cutter shaft. These ways are arranged to slide towards and from the cutting cylinder in tracks, *m m*, in the standards of the frame. This motion