

IMPROVED SLEEPING CAR.

We illustrate herewith a new construction of sleeping cars, by which the same may be easily converted into day or parlor cars. The arrangement is also such as to relieve the upper part of the car from the weight of panels and bedding. Fig. 1 is an interior view of the car with some of the berths in place, and Fig. 2 is a plan view.

The car is provided with fixed side seats of a length equal to that of a sleeping berth. Two revolving chairs are placed in front of and at opposite ends of each sofa. Under the latter is a box which holds a folding bed or mattress, the two stanchions or posts for supporting the berths, the front rail, and the folding panels or partitions which form the divisions between the sections. The location of the chair pedestals, as will be seen from Fig. 2, is such as to secure a free passage way through the car.

In making up the sleeping sections, the stanchions are reared upon the chair pedestals, the chairs being previously removed, folded, and stowed away. The upper ends of the stanchions are secured by a bracket attached to the roof of the car. Near the lower portion of each post is a collar having projections to sustain the lower bed. This collar slides over the junction of post and pedestal. Near the middle of the stanchion is a shoulder to receive and support the front and end rails of the upper berth. The inner ends of these rails have tongues, which enter sockets in the car wall. The berth bottom is supported by cleats on the inner sides of the end rails. This arrangement of separate and distinct end rails gives the advantage of making up the berths either independently of each other or all at once, as desired.

The upper berth is formed by placing the cushions of the side seats on the cleats above mentioned; while the lower berth is made by a folding bed supported upon the long seat frame and the projections on the lower stanchion collar. The ends of the side seats have double walls, to receive between them a panel, which is used to form an extension of the seat end and to aid in partitioning off the berth. Above it, the end partitions are formed by a curtain or flexible partition, which extends outward from the car wall, and which is self-closing by a spring or similar suitable means when not held extended. Rods are provided from which curtains from both upper and lower berths are suspended.

For ventilating the lower berths a vertical flue is formed in the car wall between the windows, and opens into the car just above the berth, with a register. The flue extends to nearly the top of the car, and has an outside aperture. The movement of the car draws air up from the lower berth through this conduit, thus ensuring thorough ventilation. This is an important advantage, and one calculated to render the occupancy of lower berths much more agreeable and healthy.

It will be observed from Fig. 2 that the sections on the two sides of the car are so arranged that the divisions, and consequently the revolving chairs, are not opposite each other, but intermediate.

The principal advantage claimed for the construction above detailed, over that of the ordinary sleeping car where the upper berths are folded up against the roof, is the decreased weight of the vehicle itself. As the upper berths are not fastened to and sustained by the side of the car, that portion need not be so strongly and heavily built as is usually the case. The inventor informs us that, while the common Pullman sleeping car weighs from 28 to 35 tons, his car weighs but 21 tons, a saving in weight of considerable importance.

Patented Aug. 14, 1877. For further particulars, address the patentee, Mr E. P. Kellogg, 279 Pearl street, New York city.

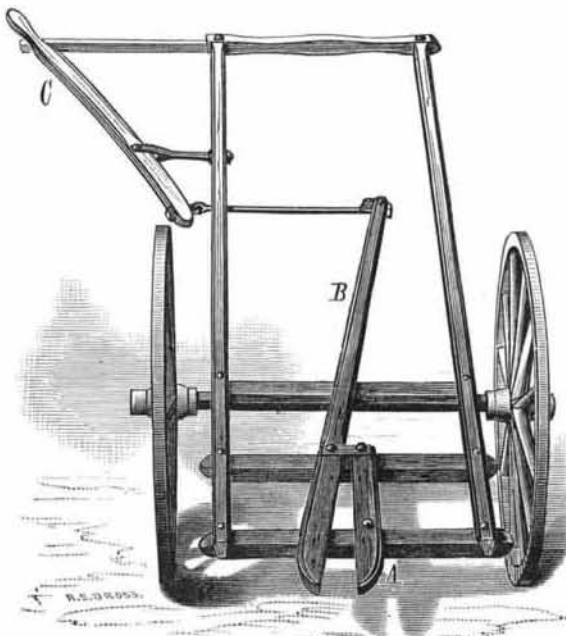
To Clean Vessels that have Contained Kerosene.

Wash the vessel with thin milk of lime, which form an emulsion with the petroleum, and removes all traces of it. By washing a second time with milk of lime and a very small quantity of chloride

of lime, and allowing the liquid to remain in the vessel about an hour, and then washing it with cold water, the smell may be removed. If the milk of lime be used warm, instead of cold, the operation is rendered much shorter.

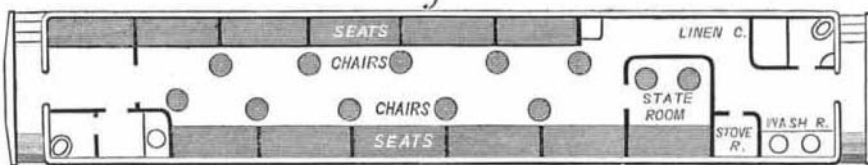
BROWN'S IMPROVED COTTON STALK PULLER.

We illustrate herewith an improved implement for pulling



cotton stalks from the ground, thus freeing the latter from roots likely to interfere with plowing. By its use it is claimed that one man can clear off three acres of stalks in a day.

Fig 2



KELLOGG'S SLEEPING CAR—PLAN VIEW.

The device consists of a frame mounted on wheels. To the forward cross bars in front of the axle is secured a stationary jaw, A, and a pivoted jaw, B. To the rear end of the latter is attached a rod connecting with a lever, C, the handle of which comes at the right hand of the operator who

pushes the machine ahead of him. The jaws seize the stalk near to the ground. The long rear portion of the frame is then used as a lever—the axle being the fulcrum—to lift the plant clear of the soil. The stalk is finally dropped by turning the machine to one side and opening the jaws.

This apparatus was exhibited at the State Fairs in Austin and Houston, Texas, in 1876 and 1877, and there obtained, we are informed, the highest premiums. It was patented by Mr. R. D. Brown, September 19, 1876. For further information address Messrs. J. J. Conklin & Co. Austin, Texas.

Projected Trans-Asiatic Railways.

No less than four great projects are now under consideration for railways across the continent of Asia. They are as follows: 1. The Baranowski project or shortest road between Moscow and Peshawur—the English fortress commanding the valley of the Indus. This starts from Saratoff, crosses the Kirghis country, follows the Amon-Deria, and traverses the mountainous region of the Hindoo-Couch. 2. The Lesseps-Cotard project: line extends from Orenburg to Peshawur via Omsk, Taschkend, Samark, and Balk. 3. The Bogdanovitch project: line extends from Moscow to Peking via Kazar, Ekatherinoburg, Omsk, Tomsk, and Irkutsk. 4. The Ruththofen project: line joins the Siberian road at Omsk, passing Taschkend, Samarkand, and Balk. At the last mentioned point the route turns to the west to Teheran, and rejoins at Tiflis the Russian Caucasian line now under construction.

The Anthropoid Apes.

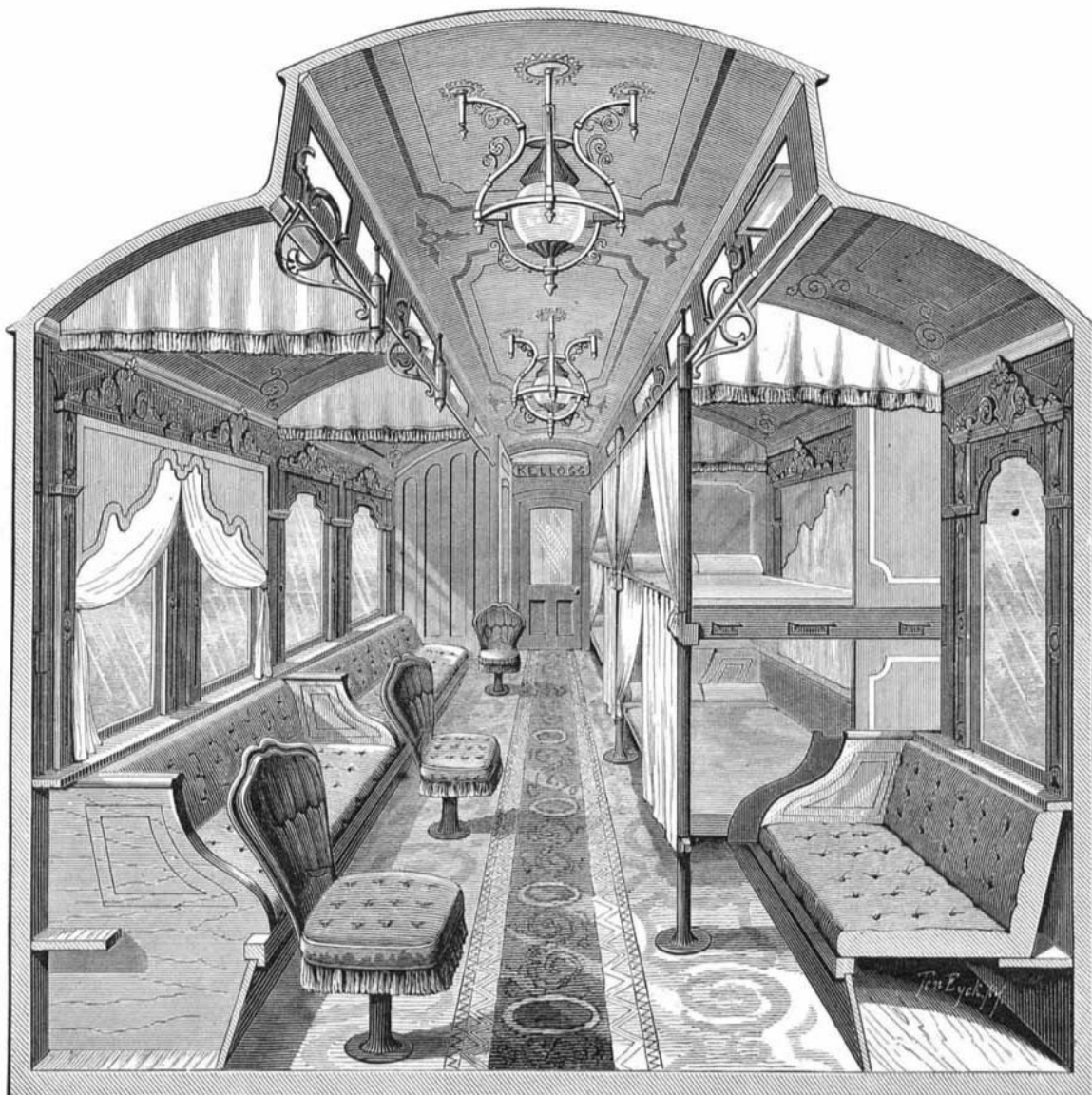
Professor Garrod, of London, stated, in a recent lecture, that he had dissected seventy apes out of the anthropoid class, and one of them exhibited the vermiform appendage of the cæcum, or blind gut, which is characteristic of man. But the anthropoids have it quite humanly developed. The hands and feet of an orang recently dead were exhibited along with those of a man, and presented the same structure. Professor Garrod showed that the structural resemblance between the anthropoid apes and man are so close that the reason for the mental and moral differences remains still an unsolved problem. Perhaps the most striking and important portion of his discussion was that in which he proved that the vocal apparatus of man are present also in the anthropoid apes. The ape does not converse, and yet the difference between his vocal apparatus is so infinitesimal as to defy observation. It is to this point that physiological investigation must now be particularly directed.

Diet for Walking.

In August last, a pedestrian named Smyth, appearing under the name of "The American Postman," accomplished the task of walking three hundred miles in six days, at Dublin. His regimen during the walk was as follows: He takes a small chop and some cocoa for breakfast. In two hours afterward a raw egg beaten up. His dinner consists of a sago pudding and a small quantity of very raw beef, without drink, and his supper of as much cocoa and bread and butter as he wishes. Each day he is allowed a quart of milk and occasional sips of ginger ale. He takes no alcoholic beverage whatever.

A Fourth Oil Rock.

The existence of a regular fourth sand, south of Bradford, has been conclusively demonstrated by the tests made on the Big Shanty well, located on the Dent track. This well, it will be remembered, was drilled several months ago to a depth of 1,598 feet, striking the third sand at 1,545 feet. The sand was about forty feet thick, and the well has been producing five barrels a day ever since, up to a few weeks ago, when the Company decided to drill the well deeper. This was done, and at a depth of 1645 feet a fourth sand was found, twelve feet in thickness and of a good quality. Pumping has already been started and the supply will be improved.



KELLOGG'S IMPROVED SLEEPING CAR.—Fig. 1.