Another was to allow it to project beyond the edge. Another was to cut out the wrapper on either side of the end, leaving a projection of the string flush with the edge. The patent under considtration introduces another expedient, namely, the cutting into the wrapper on both sides of the end of the string, so that, by means of the finger, the end of the string may be readily lifted. This expedient was probably new, and is doubtless useful, but I cannot bring myself to think that it evinces invention. It is true that in small things the advances must likewise be small, but smallness and obviousness, as applied to such advances, are not identical terms. The patent is, in my judgment, void for want of invention. The claim based on estoppel is not, in my judgment, sustained. The bill will therefore be dismissed.

DUNBAR et al. v. EASTERN ELEVATING CO. et al.

(Circuit Court of Appeals, Second Circuit. May 26, 1897.)

1. Patents—Invention—Combinations—Grain Elevators.

The Dunbar reissue, No. 10,521 (original No. 264,938), for an improvement in grain elevators, and consisting in a combination whereby a portable elevator tower is arranged to be moved along in front of the elevator, so as to reach the different hatches of the vessel, and so that two elevator legs may be simultaneously used, is void for want of invention, and as being the result of mere selection by the skilled mechanic of existing devices, and applying them to their appropriate uses, with modifications of detail to fit them for the new environment. 75 Fed. 567, reversed.

2 SAME

The circumstance that the same congregation of devices has never been assembled in the new location is not controlling, and is often of little value in determining the question of patentable novelty. Their assemblage may be nothing but an instance of a double use, and, when they require special adaptation to the new arrangement and occasion, it still remains to inquire whether this has required invention.

Appeal from the Circuit Court of the United States for the Northern District of New York.

George L. Lewis and Edmund Wetmore, for appellants. Rogers, Locke & Milburn, for appellees.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

WALLACE, Circuit Judge. This appeal presents the question of the patentable novelty of the apparatus described and claimed in reissued letters patent No. 10,521, dated September 16, 1884, to Robert Dunbar. The subject of the patent is a portable elevator, adapted for use, in connection with an ordinary grain elevator, for unloading grain from vessels. The ordinary grain elevator is a warehouse having a tower equipped with a leg carrying an endless chain and buckets, an engine, and other connections for raising the grain from the hold of the vessel or other receptacle to the upper part of the warehouse. The leg is constructed to swing out at the bottom at a greater or less angle, and to be lowered so that the

buckets, as they are carried around the endless chain, dip into the grain, and carry it up to any desired height. As the buckets turn over at the top, they empty the grain into any desired hopper or receptacle, from which it is distributed by troughs or other devices into the various parts of the storehouse. When thus constructed, it was necessary to bring the hatch of the vessel to be discharged to the leg, and, when the grain was discharged from one hatch, it was necessary to move the vessel to bring the other hatch to the leg. Dunbar conceived the idea of making an accessory elevator, which could be moved so as to reach the different hatches of the vessel, and discharge the grain into the warehouse. By using such a contrivance, it would be unnecessary to move the vessel, and both hatches could be discharged, if desirable, at the same time.

The patent describes the ordinary grain elevator or tower, with apparatus for transferring the grain to the warehouse, "constructed and arranged in the ordinary way." The portable elevator tower, as described, is the ordinary elevator placed upon wheels and a track, and equipped with devices for moving it along the front of the warehouse in order to place it in the desired position opposite the hatch of the vessel, and with devices for fastening it to the building. devices for moving the tower over the track consist of a chain or cable anchored at both ends, and connected with the drum of a windlass rotated by worm gear, so that upon turning the windlass one part of the chain is wound upon the drum and the other part is paid out. Those for fastening it to the building consist of two cables or guy ropes extending from the upper part of the warehouse to one of the upper floors of the tower, and passing downward over pulleys to the drum of a windlass on one of the lower floors of the tower. The windlass by which the guy ropes are paid out or tightened is described as being similar to that which is used for moving the tower. The building is provided with a trough, extending horizontally along its front, to receive the grain from the portable elevator at any desired point.

At the time of the alleged invention, portable elevators were old, and were of many varieties. One form of such elevators is shown in the patent to Walsh of August 20, 1878, arranged for taking the grain from the hold of a canal boat or vessel, and elevating it into a loft in a store room, or transferring it into the hold of another vessel. They were old when supported on flanged wheels and moved upon The patent to Sykes of October 12, 1869, describes one for transferring grain, arranged upon truck wheels so that it may be moved on a track of a railroad, and the grain elevated from one receptacle and transferred to another. Another form is described in the patent to Mennell of January 11, 1881, for transferring coal from holds of vessels, and discharging the same into cars, barges, or other receptacles, the frame of which is provided with wheels, and adapted to run on a track. The mechanism for moving large structures was old, and had been employed in analogous structures. The English patent to Curtiss of January 21, 1853, shows a portable structure for elevating earth in the same way that grain is elevated; the structure being supported on wheels moving on rails, and being moved backward and forward by apparatus substantially the same as that described in the patent in suit,—the ordinary windlass engaging with a cable anchored at each end. Dunbar contemplated making his portable elevator a high one, capable of emptying its contents into one of the stories of the many-storied grain elevators of Buffalo, but the patent is not limited to such an elevator. The descriptive parts, and some of the claims, though more directly addressed to such an elevator, are applicable to one of any height or size. When the elevator is not a high one, the devices for securing it to the main building could be dispensed with; and, if any at all should be needed, those of the simplest kind could be used to tie the two structures together.

In the claims of the patent the portable elevator is named as an "elevator tower," but the structure is termed in the description "an elevator or elevator tower," and both terms mean the same thing. The claims are as follows:

"(1) In an elevator tower, the combination of the mechanism, substantially as described, for moving it horizontally back and forth, with the gearing, N, drums, N', and cables, O, for securing it at any point to which it may be moved.

"(2) A movable and adjustable elevator tower, arranged upon wheels, and provided with the cables, O, gearing and drums or pulleys, N, N', and a grain spout, R, in combination with a main stationary elevator building, R', having a long, horizontally arranged trough, S, to receive the grain from any point to which the elevator tower may be adjusted.

"(3) The combination of the main stationary elevator, and the movable elevator tower, A, having wheels adapted to tracks in front of the main building, substantially as specified, whereby two elevators may be operated at the same time, so that a stationary elevator may be used in one hatch, while the movable elevator may be adjusted to operate in another hatch, substantially as specified.

"(4) The combination of a movable elevator tower, having wheels adapted to tracks, with a rope or chain, G, G', anchored at both ends, and passing around a drum or pulley, and with gearing through the medium of which the said drum may be rotated, substantially as set forth.

"(5) The combination of the stationary elevator, R', a movable elevator tower, ropes or cables connecting the two, and mechanism as shown, whereby said

ropes may be tightened and loosened, all substantially as described."

Concededly, Dunbar is entitled to the credit of originating the conception of using a second elevator as an adjunct of the ordinary grain elevator, which could be moved so as to reach the different hatches of the vessel, and discharge into the main elevator; but his right to a patent cannot rest upon this conception alone. It must rest upon the novelty of the means which he contrived to embody the conception, and to carry it into practical application. He effected a new organization of a portable elevator, but if this did not involve invention, but was that which could have been done by the skilled mechanic by selecting known devices, applying them to their appropriate uses, and introducing such modifications of detail to fit them for the new environment as would be dictated by experience and good judgment, the patent cannot be sustained.

It is manifest from what has been said of the prior state of the art that what Dunbar did was to adapt well-known devices to the special purpose to which he contemplated their application. The elevator, with all its equipment for reaching, raising, and transfer-

ring grain, was at hand. Various forms of portable elevators, carried by wheels and moved upon tracks, were at hand. To adapt his elevator to the new occasion, it was necessary that a track should be located in such relation to the warehouse that the elevator could be moved upon it back and forth to reach vessels lying at the dock, and discharge their contents into the warehouse. The devices known to builders and in common use for moving similar structures were at hand, and it was only necessary for him to select them with reference to the particular structure to be moved. It was necessary to select a more powerful windlass and a stronger cable, if he proposed to move an elevator of large size and weight, than would be required to move one of smaller size and weight. It was necessary that appropriate fastening devices should be selected to secure the elevator to the warehouse when doing its work of discharging from the vessel, and these were at hand, in great variety of forms. It was also necessary that a receptacle for the grain at the warehouse should be provided, which could be reached by the discharging spout of the elevator.

We are unable to doubt that all these things were within the range of ordinary mechanical skill, and that they could have been suggested and constructed by any competent builder, and that what Dunbar did was merely to exercise the common skill of the calling in locating his track, and selecting his moving and fastening devices, and in arranging the proportions and subsidiary features of his portable elevator to correspond with those of the warehouse. The fastening devices which he employed have no special novelty, if indeed, they are of any utility except when the movable elevator is a tall one. Hooks would have answered as well, and upon the tall elevator of the defendants hooks are used. Any intelligent man would have known that, if a tall elevator were to be used, it would be expedient to attach the structures together at the upper part. The trough which he placed along the front of the warehouse was the receptacle most obviously convenient, and in common use in the grain elevators for distributing the grain to different parts of a building. It certainly did not involve inventive skill to place it on the outside of the building, within reach of the spout of the portable elevator.

We are not unmindful of the advantages which have resulted from the new organization of the elevator described in the patent, but we are unable to doubt that the improvements of Dunbar were but the work of an intelligent builder. When, in the evolution of grain elevator construction, their desirability became manifest, it did not require genius or inventive faculty to create them. As was said in Atlantic Works v. Brady, 107 U. S. 192, 2 Sup. Ct. 225, the process of development "creates a constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development."

The learned judge who decided the cause in the court below said:

"Unquestionably, the methods adopted by the inventor to carry out his conception, considered separately, were old, but the combinations were new,

Wheels, tracks, spouts, windlasses, troughs, and guy ropes were undoubtedly well known, but no one had ever assembled them in congeries producing a movable elevator tower."

The circumstance that the same congregation of devices has never been assembled in a new location is not controlling, and is often of little value in determining the question of patentable novelty. Their assemblage may be nothing but another instance of a double use, and, when they require special adaptation to the new arrangement and occasion, it still remains to inquire whether this has required invention. "It rarely happens that old instrumentalities are so perfectly adapted for a use for which they were not originally intended as not to require any alteration or modification. If these changes involve only the exercise of ordinary mechanical skill, they do not sanction the patent; and, in most of the adjudged cases where it has been held that the application of old devices to a new use was not patentable, there were changes of form, proportion, or organization of this character which were necessary to accommodate them to the new occasion." Aron v. Railway Co., 132 U. S. 90, 10 Sup. Ct. 24.

We conclude that the patent is void for want of novelty, and that the decree should be reversed, with costs, and with directions to dismiss the bill.

PEDERSON v. JOHN D. SPRECKELS & BROS. CO.

(District Court, N. D. California, May 24, 1897.)

No. 11,212.

TOWAGE-INJURY TO MATE OF TOW-LIABILITY OF TUG OWNERS.

A schooner was taken in tow by a tug. The mate of the schooner superintended the fastening of the line on the schooner, and caused it to be passed through the breast chock instead of the forward chock, and made fast to the pawl bitt, instead of to the windlass bitt, which would have given a straighter lead, and been in accordance with better seamanship. In the towing, the breast chock gave way, and the rope struck the mate, throwing him against the capstan, and breaking his leg. Held, on the evidence, that the breaking of the chock was due to this manner of fastening, and not to excessive speed of the tug, and that the tug owners were not liable.

Libel in personam to recover damages in the sum of \$20,000 for alleged negligence in towing the schooner S. Danielson at an excessive speed, thereby breaking the breast chock on the schooner, and throwing the libelant against the capstan, breaking his leg.

H. W. Hutton, for libelant. Delmas & Shortridge, for respondent.

MORROW, District Judge. This is a libel in personam by Louis A. Pederson to recover damages in the sum of \$20,000 from the John D. Spreckels & Bros. Company. The libelant was the mate of the schooner S. Danielson. At the time of the accident, which occurred on the morning of the 6th of August, 1895, the schooner was being towed in the waters of the Santa Barbara Channel by the tug Vigilant, owned by the respondent. The towline was made fast to