W. D. LOCKWOOD.

SCREED STRIP.

APPLICATION FILED FEB. 10, 1917.

1,247,554. Patented Nov. 20, 1917.

Fig. 1.

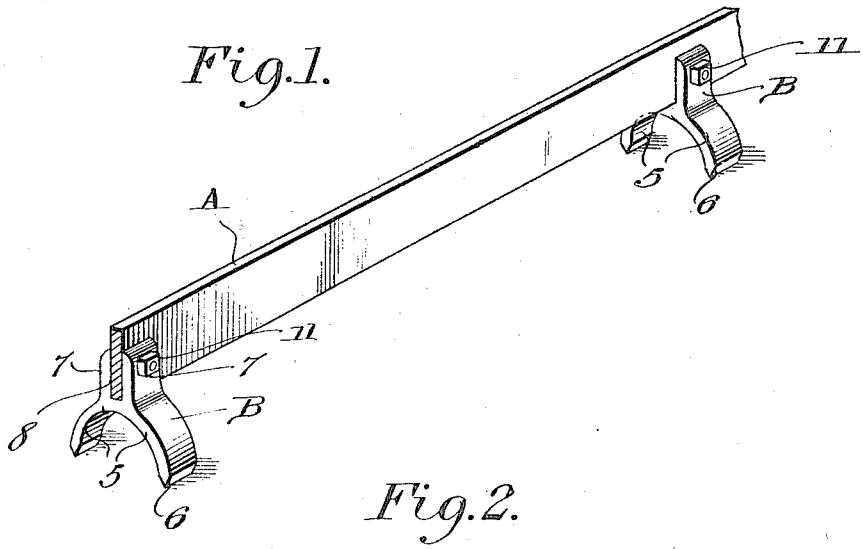
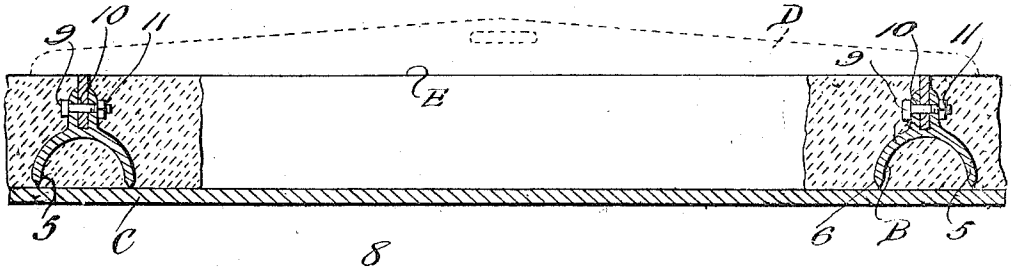


Fig. 2.



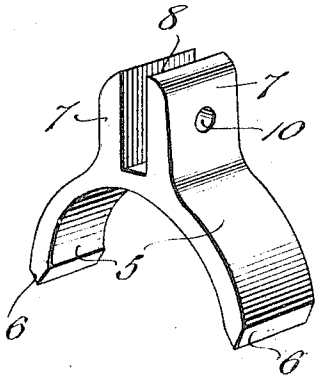


Fig. 3.

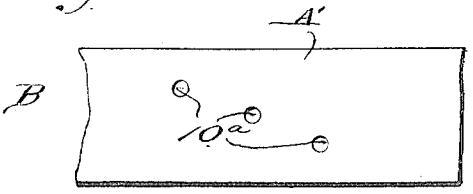


Fig. 4.

WITNESS

Frederick W. Ely.

INVENTOR

W. D. Lockwood.

BY Victor J. Evans

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLARD D. LOCKWOOD, OF PHILADELPHIA, PENNSYLVANIA.

SCREED-STRIP.

1,247,554. Specification of Letters Patent. Patented Nov. 20, 1917.

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To all whom it may concern:

Be it known that I, WILLARD D. LOCKWOOD, a citizen of the United States, residing at Pier 78, South Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Screed-Strips, of which the following is a specification.

This invention relates to improvements in the art of laying concrete and other monolithic substances, and has particular reference to a novel form of screed strip of the character employed in defining the level of concrete surfaces, such as floors and the like.

In carrying out the invention, use is made of a plurality of spaced metallic screed strips, which are adapted to be placed in parallel rows upon a suitable base or mold board, then concrete in a plastic condition is poured between the strips, and while in this condition a screed board (in other words a leveling board) is pushed back and forth along the upper surface of the strips, so that concrete between the latter will be smoothly finished to a level defined by the height of the strips, thereby preventing undulations and similar defects appearing in the concrete after the latter has assumed permanent form.

An object of the invention is to provide a screed strip of the above character, which may be readily positioned upon a suitable base, without requiring the services of fastening elements, and in one which may be readily removed from engagement with the concrete, after the latter has been leveled, in a simple and convenient manner, without unduly disturbing or destroying the condition of the concrete surrounding the strips.

Other objects will be in part obvious and in part pointed out hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a screed strip and its associated supporting elements comprising the present invention.

Fig. 2 is a transverse sectional view taken through a plurality of spaced screed strips and indicating the same in an operative position.

Fig. 3 is a detail perspective view of one of the supporting elements.

Fig. 4 is a detail elevation of a slightly modified form of screed strip.

Referring more particularly to the drawing, the invention in its preferred form consists of a strip A of any suitable material, but preferably of metal. The strip is supported in an operative position through the agency of supporting elements B, which are formed to provide arched supporting legs 5. The lower extremities of said legs may be provided with beveled edges 6, which prevent the supporting elements from slipping. The upper portions of the elements are preferably bifurcated to provide strip-engaging arms 7, between which a slot 8 is formed for the reception of the screed strip. The latter is secured to the supporting elements through the agency of fastening bolts or the like 9, which pass through alined openings 10, formed in the securing elements and the screed strip, and are provided with threaded nuts 11, to bind the parts in operative and secured relation.

In operation, the strips A are positioned in the manner disclosed in Fig. 2 of the drawing, that is, in spaced relation; the elements B resting upon a suitable flooring or mold boards C. Then concrete in a plastic condition is poured between the strips, to a level substantially equal to the height of the upper edges of the screed strips. It will be apparent that when the concrete is thus roughly inserted between the strips, the upper surface thereof will be rough and uneven, and to finish this surface a screed board D is pushed back and forth along the upper edges of the screed strips, so that the upper surface E of the concrete will be reduced or brought to a level defined by the height of the screed strips.

From the foregoing it will be seen that the present invention provides a screed strip construction which may be repeatedly used and is capable of being readily and rigidly positioned upon the base C without resorting to the use of securing elements to retain it in such position. Furthermore, the same can be conveniently removed from the concrete, after the latter has been leveled, in a convenient manner, without unnecessarily damaging or destroying the surrounding concrete. After the removal of the strip the crevices thus created in the concrete may be readily filled by the insertion of additional material. The ease by which the

screed strip may be removed from the concrete is an exceedingly desirable feature of this invention, as hitherto it has been the common practice to simply employ planking, which was nailed by means of suitable uprights to the base C, and it will be obvious that upon attempting to remove this construction, that considerable difficulty was encountered in extricating the uprights, and the planking from their operative positions. After the planking had been removed it has been impossible to place the same into service again, by reason of the damage sustained during the removal of the same from engagement with the concrete. By use of the present invention this expense is eliminated by reason of the permanent character of the screed strip, and its strong and durable construction.

It will thus be seen that there is provided a device in which the objects of the invention are achieved, and that all of the advantageous features above mentioned are, among others, present. The device can be economically manufactured, is of but relatively few parts, and when the latter are once set the device will not be liable to slip or to come out of position. The principal use to which the invention may be placed is in the laying of concrete floors. However, the invention is applicable to all classes of construction in which concrete is laid in sheet formation.

In Fig. 4 of the drawing there has been illustrated a method whereby the height of the screed strip A′ may be varied. Ordinarily this is accomplished through the use of supporting elements of various proportions. However, by forming the diagonally alining openings 10^a in the screed strip, the height of the latter may be regulated in accordance to which of the openings the securing elements are positioned, as will be clearly understood. Spacing blocks (not shown) may be employed to engage with the lower edge of the strip and with the bottom of the socket 8 so as to prevent the strip from shaking when in operation.

Having described the invention what is claimed as new and patentable is:

1. A device of the class described comprising in combination, a plurality of arch shaped elements, a pair of spaced apertured ears projecting from each element, a metallic screed strip disposed edgewise between said ears, said strip having an obliquely disposed series of openings adapted to register with the apertures in said ears, whereby the height of said strip may be varied, and a fastening element passed through said ears and strip for holding said parts fixed relatively.

2. In a device of the class described, a screed strip, a plurality of supporting elements therefor, said elements being designed to support the strip edgewise, said supports having openings, said strip having an angularly disposed series of openings adjacent each end adapted to register with the openings of said supports, and a fastening element associated with each supporting element and adapted to be received by said openings in the strip, whereby the latter may be secured to said supporting elements and its height varied.

3. A device of the class described comprising in combination a metallic screed strip, a plurality of supports therefor, each support embodying an arch-shaped body terminating in sharpened edges adapted to bite into the support with which it is used to prevent slipping of said support, spaced parallel ears projecting centrally from the convexed side of said body and adapted to receive the screed strip therebetween, said strip having an angularly disposed series of openings, and a bolt adapted to be passed through said openings and said ears for securing the strip to said supports at varying heights.

In testimony whereof I affix my signature.

WILLARD D. LOCKWOOD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."