This invention relates to hand rammers and tampers, and it has for its object the production of a novel and efficient device for firmly packing soil, gravel and concrete, etc.

Through experience I have found that in using the ordinary packer or rammer, even when thin layers of soil are used, that a crust is formed and the soil will be fairly compact on the top for a depth of an inch or less, and the underlying material will be practically as loose as when deposited. By using the tool, as hereinafter described, I obviate this and cause the material to be packed from the bottom upward.

Another object of this invention is the production of a hand rammer, which is simple in construction, efficient in operation and consists of a minimum number of parts. With these and other objects in view this invention consists of certain novel constructions, combinations, and arrangements of parts as will be hereinafter described and claimed.

In the drawings: Figure 1 is a top plan view of the body of the rammer; Fig. 2 is a bottom plan view of the same; Fig. 3 is a transverse section of the rammer; Fig. 4 is another embodiment of the same; Fig. 5 is a bottom plan view of one of the detachable cone-shaped lugs secured to a portion of the body portion of the rammer.

Referring to the drawing by numerals, 1 designates the body which is provided upon the upper face thereof with inclined sides 2.

Upon the top of the body and formed integral therewith is formed an upwardly-extending portion 3, which is provided with a socket 4 in which is positioned a handle 5, which handle is held in the socket 4 by means of a pin 6, which passes through the upwardly-extending portion 3 and the handle 5 and firmly secures the handle within the socket 4. Upon the bottom of the body portion 1 which has an extended horizontal surface are formed a plurality of integral detachable cone-shaped lugs 7, which are spaced apart in any desired formation, as, for instance, as shown in Fig. 2.

By having the lugs secured to the bottom of the body 1 as before specified, when the tool is used, lugs will when engaging the earth or soil penetrate therein, and thereby prevent a crust from being formed upon the top, as very often happens when a plain surface is used for packing soil. By having the lugs penetrating through the top layer or surface the same will cause the soil or gravel to be packed firmly not only upon the top surface but also from the bottom upward, especially when thin layers of earth are used. Of course, the tool will have the same effect when comparatively thick layers are used for by having the lugs cone-shaped and tapering toward the lower ends the same will not allow a crust to form and will pack the soil evenly.

In Fig. 4, I have shown a modification of my invention. To the body portion 1 are secured depending cone-shaped lugs 7, which are provided upon the top thereof with a laterally-extending flange 8 and said lugs 7 are firmly secured to the base 1 by means of rivets 9, which pass through the flanges 8 of the cone-shaped depending lugs and firmly secure said lugs to the body portion.

From the foregoing description, it will be obvious that I have provided a simple and comparatively cheaply constructed hand rammer. In my preferred embodiment, I have shown the tool formed in a single piece, that is to say, having the lugs formed integral upon the body thereof and an upwardly-extending integral socket portion formed upon the top thereof adapted to receive a handle. It will also be obvious that I have provided a tool, which will readily pack soil, gravel or concrete and will not allow a crust to be formed upon the top and will pack the soil uniformly throughout its depth.

What I claim is:

1. A hand tamping implement, comprising a body portion having an extended horizontal bottom, and lugs projecting from said bottom, each in the shape of a frustum of a cone, said lugs being spaced apart and spread over the bottom of the body portion, and a handle on the top of the body portion.

2. A hand tamping implement, comprising a body portion having an extended horizontal bottom, and detachable lugs project-
ing from said bottom, each of the lugs being in the shape of a frustum of a cone and hav- 
ing a flanged top secured to said body por- 
tion, said lugs being spaced apart and spread 
over the bottom of the body portion, and a handle projecting from the top of the body portion.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

ARTHUR M. LIND.

Witnesses:
ELMER ENGAAKRETHON,
H. G. HOCKING.