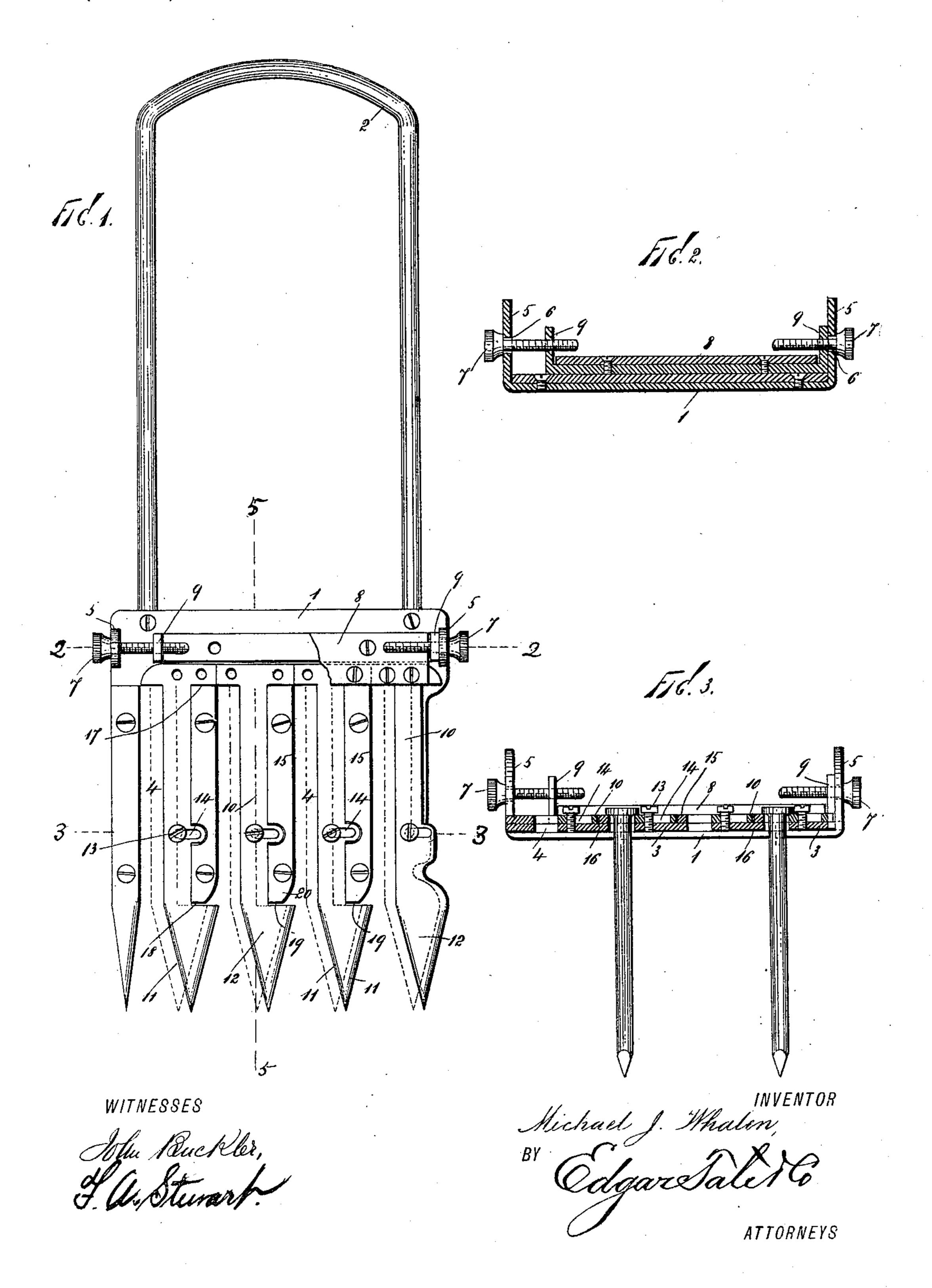
# M. J. WHALEN.

# TOOL FOR ASSORTING AND BUNCHING NAILS.

(No Model.)

(Application filed Dec. 6, 1899.)

2 Sheets—Sheet 1.



Patented Sept. 25, 1900.

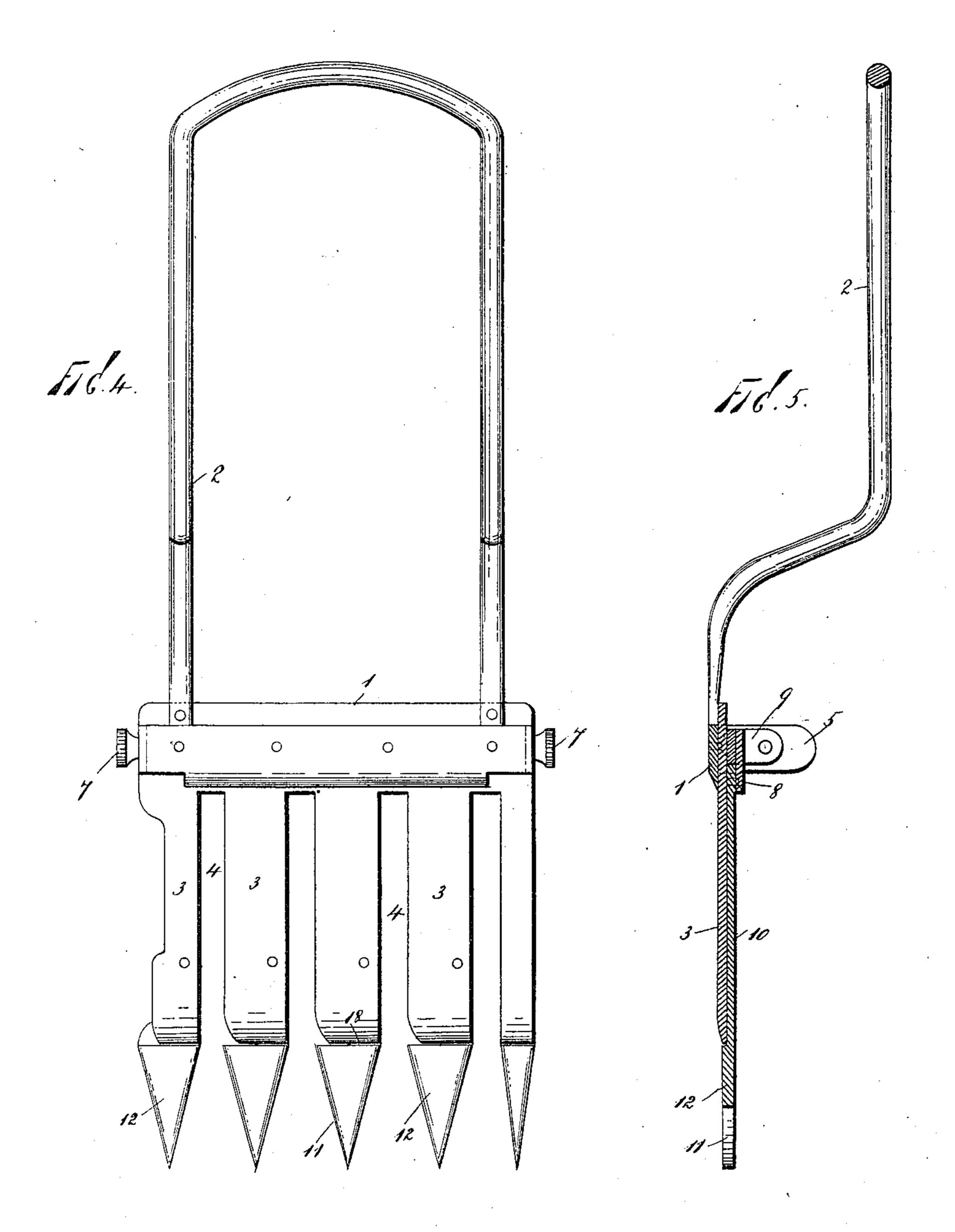
### M. J. WHALEN.

#### TOOL FOR ASSORTING AND BUNCHING NAILS.

(No Model.)

(Application filed Dec. 6, 1899.)

2 Sheets-Sheet 2.



Solu Buckler, H. Stewart.

Stichael J. Maden

BY Colgar Late 16.

ATTORNEYS

# United States Patent Office

MICHAEL JOSEPH WHALEN, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND ALBERT PASTERNAK, OF SAME PLACE.

## TOOL FOR ASSORTING AND BUNCHING NAILS.

SPECIFICATION forming part of Letters Patent No. 658,537, dated September 25, 1900.

Application filed December 6, 1899. Serial No. 739,355. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL JOSEPH WHA-LEN, a citizen of the United States, residing at New York, (Long Island City,) in the county 5 of Queens and State of New York, have invented certain new and useful Improvements in Tools for Assorting and Bunching Nails, of which the following is a full and complete specification, such as will enable those skilled to in the art to which it appertains to make and use the same.

This invention relates to tools for assorting and bunching nails; and it has for its object to provide a simple and improved tool of this 15 character which will be adjustably adapted for assorting various sizes of wire nails, its range of effectiveness extending from very small nails to large ones, which can be conveniently operated, and which will be inex-

20 pensive, effective, and efficient.

In the accompanying drawings, forming part of this specification, in which like numerals of reference denote corresponding parts in the several views, Figure 1 is a top or plan 25 view of the tool embodying my invention. Fig. 2 is a transverse sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is an inverted plan view. Fig. 5 is a 30 longitudinal sectional view taken on the line

5 5 of Fig. 1.

Referring to the drawings, 1 designates a suitable base-plate, from which extends rearwardly a handle 2, which is preferably of 35 skeleton form, as herein shown. From the base-plate 1 a series of fingers 3 project forwardly in parallel position with an intervening space, as at 4. At the ends of the baseplate 1 brackets 5 5 project upwardly, and 40 through openings 6 in said brackets pass setscrews 7 7. A top plate 8 is slidable upon the top of the base-plate 1 and is adapted to be adjusted thereon in a transverse movement with relation to the tool or instrument, said 45 top plate being provided at its ends with lugs or brackets 9 9, having threaded openings, which are engaged by the set-screws 7 7. Said adjustable plate 8 carries a series of forwardly-projecting fingers 10, which are ar-50 ranged in parallel position and relatively with

respect to the fingers 3 and have their side edges at their front ends beveled or inclined, as at 11, to provide an approximately Vshaped or pointed front end 12. The fingers 10 are slidably connected to the fingers 3 by 55 means of pins or studs 13, projecting from the top of the fingers 3 and engaging transverselyextended slots 14 in the fingers 10. The relative construction and arrangement is such that the fingers 10 have a sliding or adjust- 60 able movement upon the fingers 3 with respect to the intervening open spaces 4, whereby the width of said spaces between the fingers is varied to adapt the tool or instrument for various sizes of nails.

In the practical construction of the device the fingers 3 are preferably provided at the side opposite the side which carries the adjustable fingers 10 with a raised portion 15, the inner edge of which, 16, forms a stop for 70 the inward adjustment of the fingers 10, while the rear edges of said top enlargement 15 form a shoulder 17, against which the front edge of the sliding plate 8 is guided, while the front ends of said enlargement form a 75 shoulder 18, against which a similar shoulder 19 upon the fingers 10 in rear of their pointed front ends 12 is guided. The front outer edges of the enlarged portion 15 may be beveled, as at 20, to form a continuous beveled 80 edge in conjunction with the points 12 when the arms 10 are at the limit of their lateral outer adjustment, as indicated in dotted lines in Fig. 1.

The operation and advantages of my in-85 vention will be readily understood. The tool is simply grasped in the hand by means of the handle 2 and thrust into an assortment of nails and then lifted therefrom, by which operation only those nails adapted to the ad- 90 justment of the device will be retained within the intervening spaces 4, as illustrated in Fig. 3, while smaller nails will not be lifted by the device. The adjustment of the device by means of the set-screws to vary the lateral 95 projection of the sliding fingers 10 may be conveniently effected to adapt the device for any desired size of nails. The pointed ends 12 facilitate the entrance of the nails into the intervening spaces 4 when the device is thrust 100

into an assortment of nails, and in the general adaptability and operation of the device it will be noted that it will not only assort nails of various sizes, according to the degree 5 of adjustment at which it is set, but that it will also conveniently bunch the same.

It will be understood that in the operation of the device to assort nails the device is first adjusted in its adaptable position for the to largest size of nails which are in the assortment. When it is thrust in the pile of nails of various sizes and lifted therefrom in a movement inwardly and upwardly, it will retain within the spaces between the fingers only 15 the nails of the largest size, (in relation to which it has been adjusted,) the smaller nails of course dropping through said spaces. The larger nails, which are thus engaged by the device, are then simply dropped into the de-20 sired receptacle, and the operation is continued until all the nails of the largest size have been thus selected and removed from the assortment. The device is then adjusted in its adaptability to the next largest size of nails 25 in the assortment and the operation is repeated until all the nails of that size have been selected and removed, and so on until the smallest-sized nails in the assortment are

reached. With relation to the operation of bunching nails, it will be understood that "bunched" nails are assembled together in a bunch with their heads all correspondingly at one end of the bunch, whereby said nails may be carried 35 in the hand for driving. This operation of bunching is ordinarily done by hand; but with my improved device, inasmuch as it assembles the nails in the spaces between the fingers with their heads all in uniform rela-40 tion, (see Fig. 3,) they may when it is desired to bunch the nails, in lieu of simply dropping them into the desired receptacle, be simply drawn or slid out from between the spaces by hand, when they will of course all be in 45 bunched condition with their heads uniformly at one end of the bunch.

Having fully described my invention, I

claim as new and desire to secure by Letters Patent—

1. A device for assorting and bunching 50 nails, comprising a main plate or body portion carrying a handle and having a series of parallel projecting fingers arranged with intervening spaces, an auxiliary plate provided with a series of parallel projecting fingers 55 having an adjustable movement with relation to the main fingers and with respect to said intervening spaces, and means for adjusting said auxiliary plate, substantially as and for the purpose set forth.

2. A device for assorting and bunching nails, comprising a series of projecting fingers arranged with intervening spaces, and a series of auxiliary fingers adjustably arranged with relation to the main fingers and with 65 respect to said intervening space and carrying at their front end a beveled or pointed portion forming a guide to said intervening spaces, substantially as and for the purpose set forth.

3. A device for assorting and bunching nails, comprising a main plate or body portion provided with a handle and with a series of parallel projecting fingers arranged with intervening spaces, a supplementary plate car- 75 ried by said main plate and provided with a series of parallel projecting auxiliary fingers which are adjustably arranged with relation to said main fingers and with respect to said intervening space, means for guiding or lim- 80 iting the adjustable movement of the auxiliary fingers, and means for securing the auxiliary plate in adjustable connection with the main plate, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 4th day of December, 1899.

MICHAEL JOSEPH WHALEN.

Witnesses:

F. A. STEWART, V. M. Vosler.