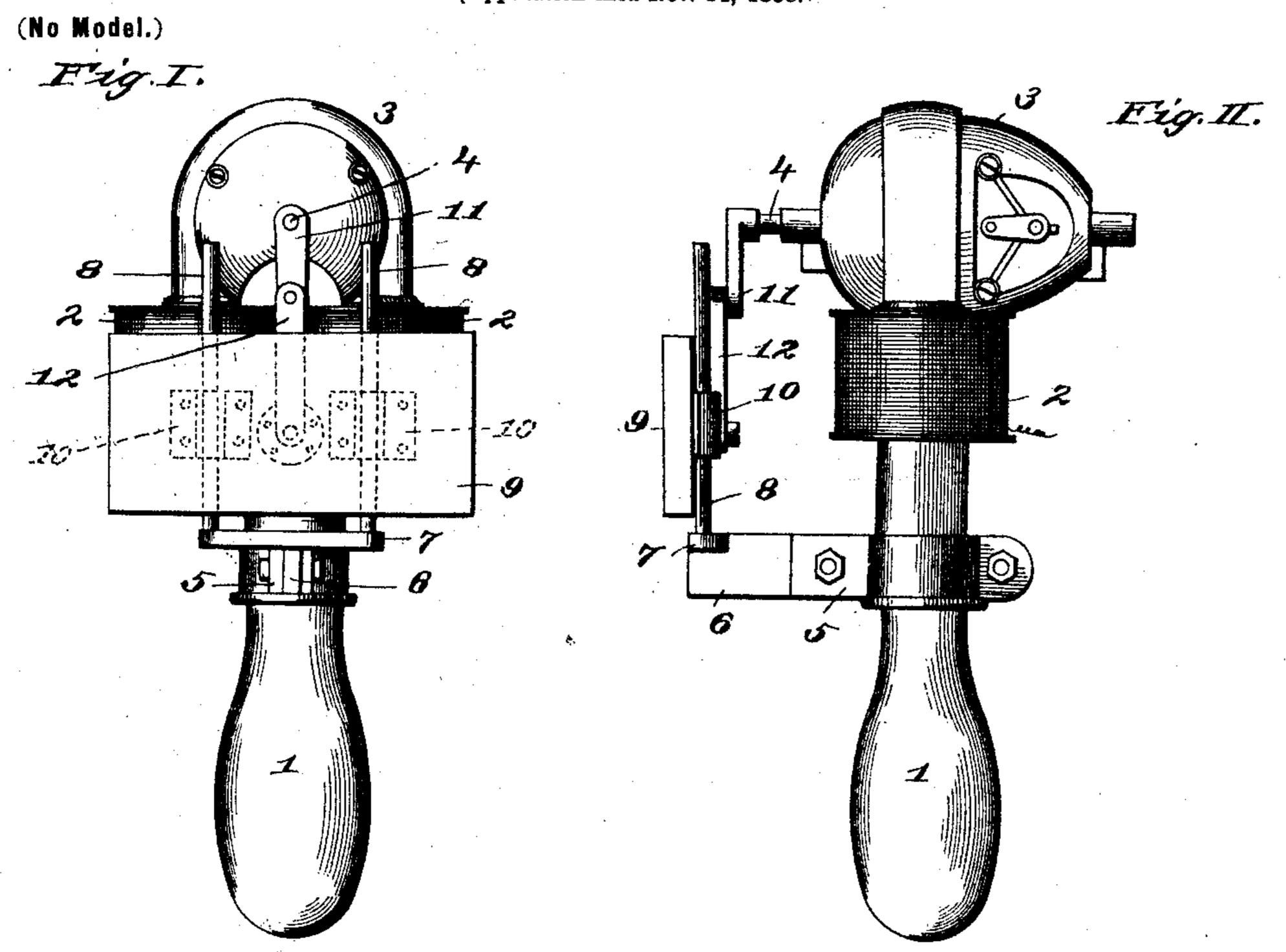
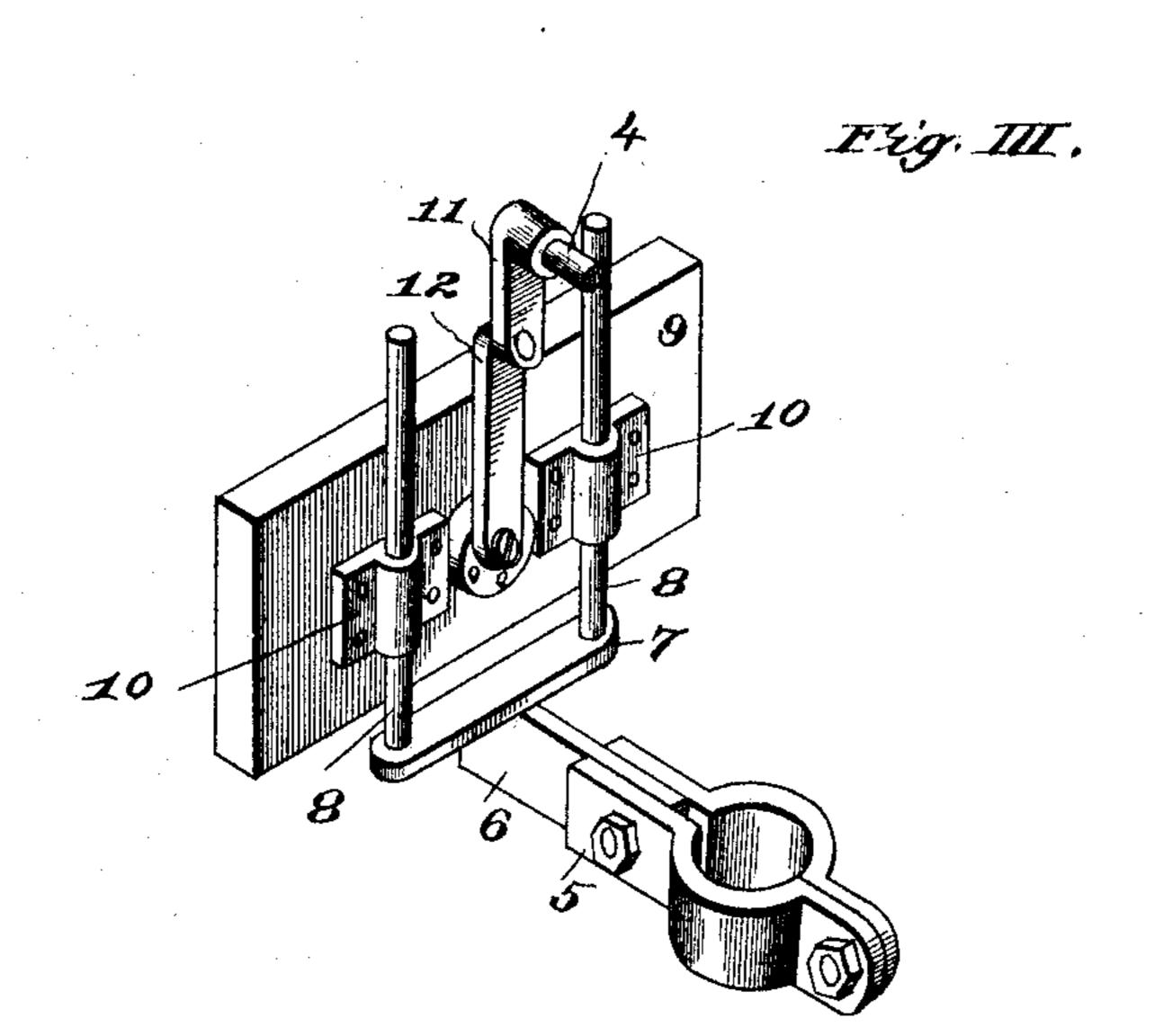
J. S. BAUM.

POLISHING OR ABRADING DEVICE.

(Application filed Nov. 14, 1898.)





United States Patent Office.

JOSEPH S. BAUM, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-TENTH TO JOSEPH FRANKLIN, OF KIRKWOOD, MISSOURI.

POLISHING OR ABRADING DEVICE.

SPECIFICATION forming part of Letters Patent No. 631,690, dated August 22, 1899.

Application filed November 14, 1898. Serial No. 696, 366. (No model.)

To all whom it may concern:

Be it known that I, Joseph S. Baum, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Polishing or Abrading Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an electrical handmotor device for polishing window or other glass, stone, wood, metal, or other materials, or for abrading or roughening materials of

15 any description.

Briefly stated, the invention consists in an electrical motor with a suitable handle applied thereto and a polishing or abrading slide having connection with the armature-shaft of the motor and arranged to be reciprocated in the operation of said shaft.

My invention consists in features of novelty hereinafter fully described, and pointed out

in the claims.

Figure I is a front elevation of the device. Fig. II is a side elevation. Fig. III is a perspective view of the slide, its supports, and armature-shaft connection.

Accientate the headle

1 designates the handle of the device, on which is mounted a pair of magnets 2, that are adapted to be connected with a suitable supply of electric energy. In connection with the magnets 2 is a motor 3, having an armature-shaft 4.

on the arm 6 is a cross-piece 7, on which a pair of guides 8 are mounted. 9 designates the polishing or abrading slide, that is reciprocally mounted upon said guides 8, so as to travel to and fro on said guides. I have shown the slide connected to the guides by clips 10, which form boxes that travel on said guides.

On the forward end of the armature-shaft 4 is a crank 11, that is connected to the slide 9 through means of a link 12, one end of which link connects with the said crank, while the other end is pivotally joined to the slide 9.

The slide 9 may be of any material of a suitable nature in the use of which the object sought to be attained may be accomplished. For instance, if it is desired to polish glass,

wood, or other materials having hard surfaces a cloth facing may be applied to the slide, or if it is desired to abrade or roughen a surface 55 a sheet of sanded material might be used as a facing for the slide. Again, the slide might be entirely of some polishing or abrading material of a suitable nature. I wish it understood that I do not confine myself to the use 60 of any particular form of slide or facing that may be applied thereto.

In the practical use of this device the electric motor thereof is connected with a suitable source of electricity, the energy of which 65 causes the operation of the motor and the motion of the armature-shaft to be transmitted to the slide 9 through the crank 11 and link 12, whereby the slide is caused to be rapidly reciprocally moved on the guides 8. The 70 slide 9 is then held in contact with the surface to be polished or abraded. The slide, moving rapidly in its action, enables the work of polishing or abrading to be rapidly accomplished while the device is moved rapidly 75 over the surface being acted upon.

I claim as my invention—

1. In a device of the character described, the combination of an electrical motor, a pair of magnets, a handle, a shackle mounted on 80 said handle, a cross-piece carried by said shackle, guides mounted on said cross-piece, a reciprocating slide movably mounted on said guides, a crank carried by the armature-shaft of the motor, and a link forming a constant of the motor, and a link forming a constant said slide, substantially as described.

2. The combination of the handle, the magnets secured to the handle, the electric motor, having an armature-shaft and supported 90 by the magnets, the shackle secured to the handle, the cross-piece provided with guiderods, the arm whereby the cross-piece is connected with the shackle, the reciprocating slide having clips whereby it is mounted on 95 the guide-rods, the crank secured to the armature-shaft, and the link whereby the crank is connected with the reciprocating slide; substantially as described.

JOS. S. BAUM.

In presence of— E. S. KNIGHT, STANLEY STONER.