(No Model.) 2 Sheets—Sheet 1.

C. SCHOLL.

WIRE CORRUGATING MACHINE.

No. 497,826. Patented May 23, 1893.

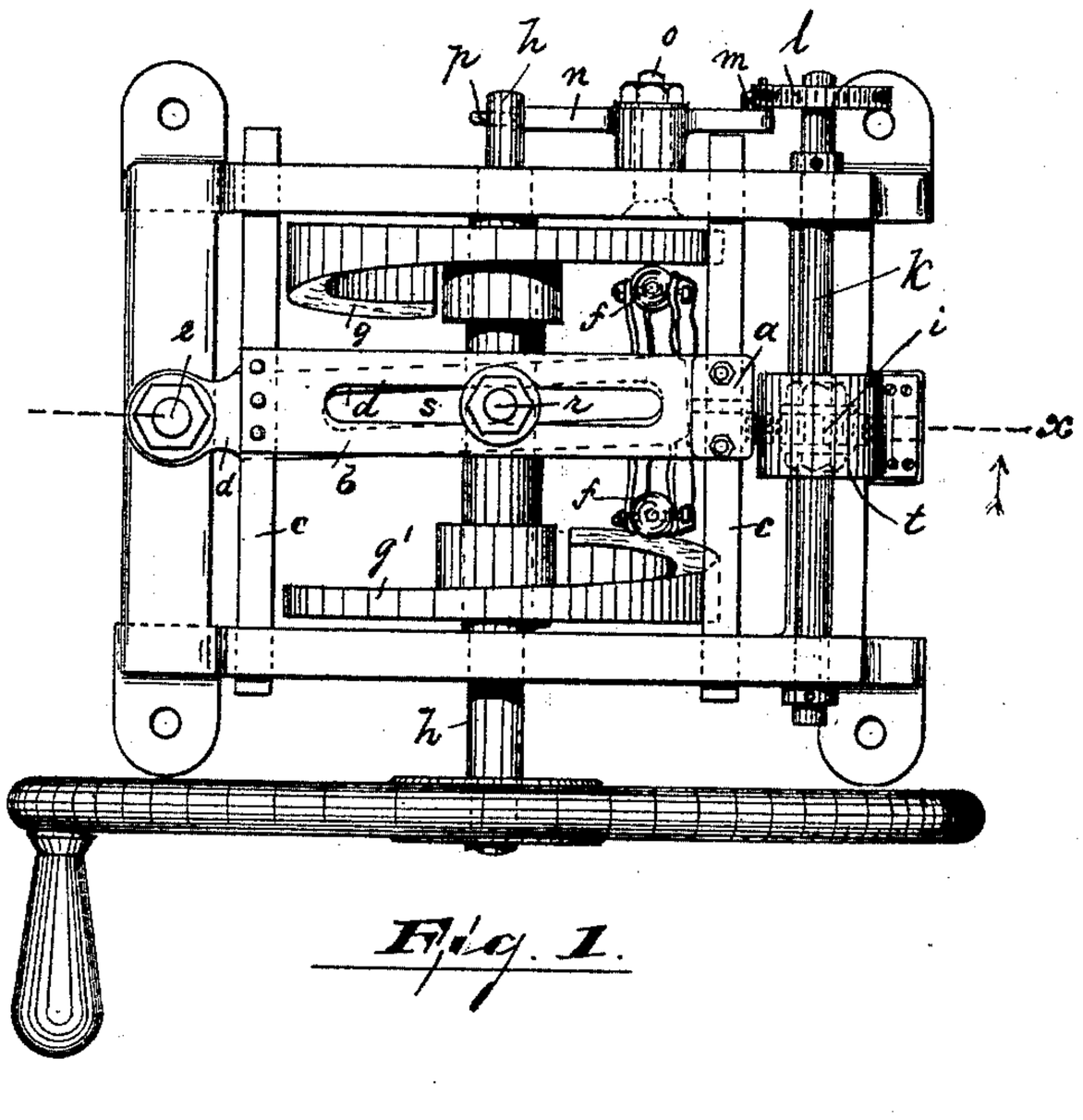

Fig. 1.

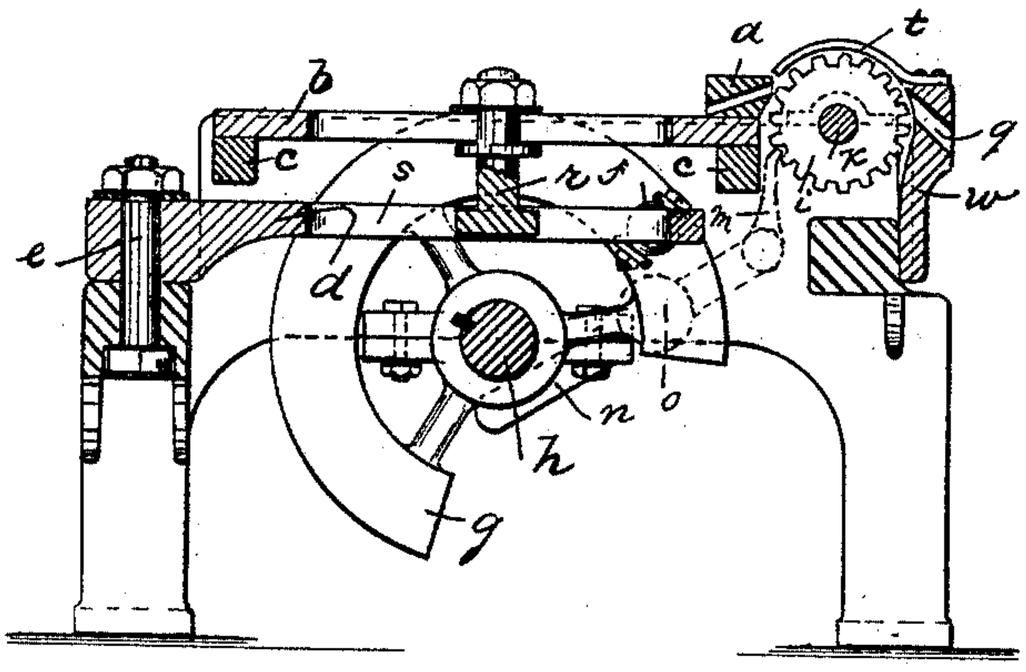

Fig. 2.

WITNESSES:
E Burkheiser.
E. L. Sherman

INVENTOR:
Carl Scholl
BY Gartner & Co
ATTORNEYS

(No Model.) 2 Sheets—Sheet 2.

C. SCHOLL.

WIRE CORRUGATING MACHINE.

No. 497,826. Patented May 23, 1893.

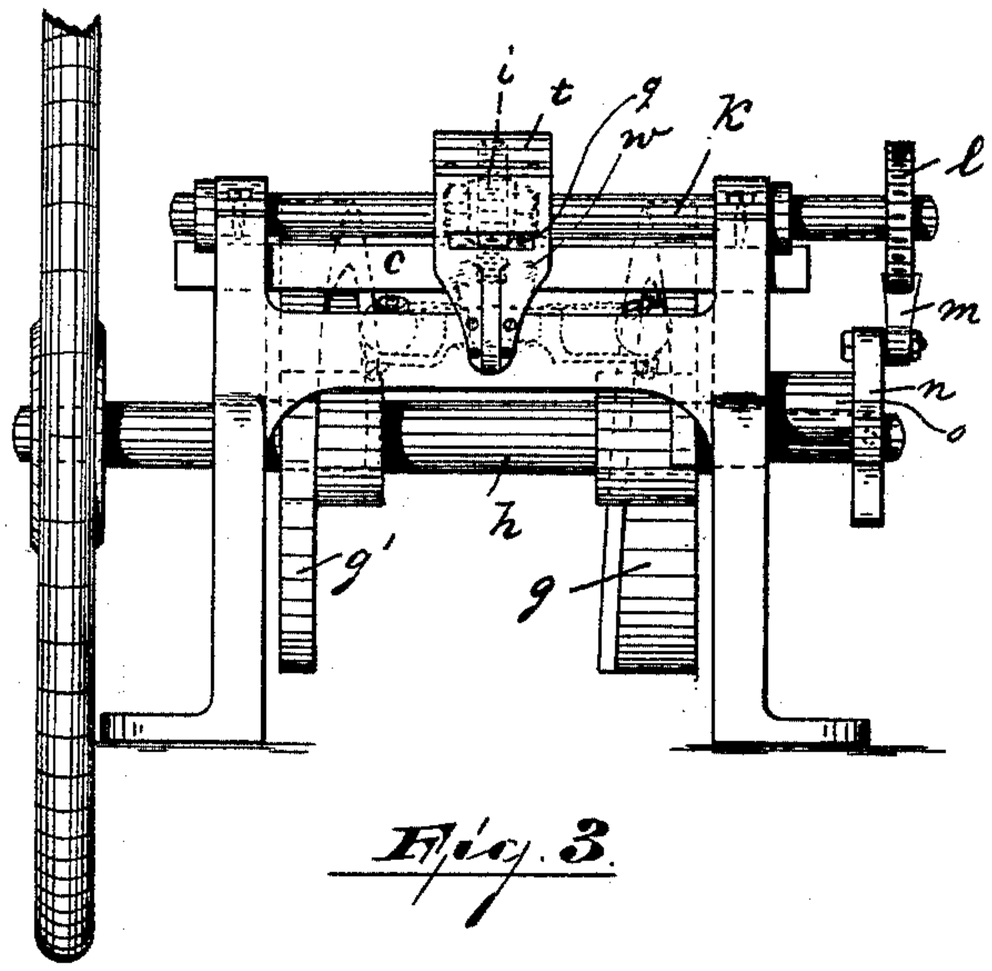

Fig. 3.

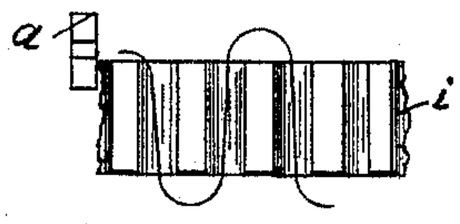

Fig. 4.

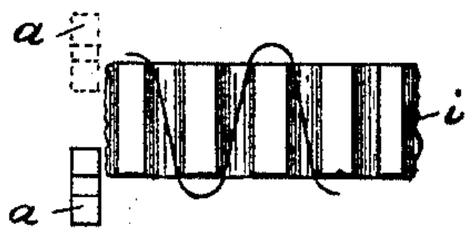

Fig. 5.

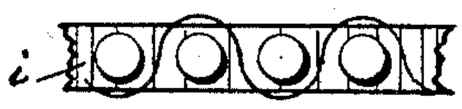

Fig. 6.

WITNESSES:
E. Buskheiser.
E. L. Sherman

INVENTOR:
Carl Scholl
BY Gartner & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

CARL SCHOLL, OF GÖPPINGEN, GERMANY.

WIRE-CORRUGATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 497,826, dated May 23, 1893.

Application filed September 4, 1891. Serial No. 404,749. (No model.) Patented in Germany December 25, 1890, No. 58,745; in France May 28, 1891, No. 213,746; in England June 25, 1891, No. 10,813, and in Belgium October 27, 1891, No. 96,965.

To all whom it may concern:

Be it known that I, CARL SCHOLL, manufacturer, a subject of the Emperor of Germany, residing at Göppingen, in Germany, have invented a new and Improved Machine for Producing Corrugated Wire, (for which I have obtained the following Letters Patent: in England, No. 10,813, dated June 25, 1891; in France, No. 213,746, dated May 28, 1891; in Belgium, No. 96,965, dated October 27, 1891, and in Germany, No. 58,745, dated December 25, 1890,) of which the following is a full, clear, and exact specification.

The object of this invention is to provide a simple wire corrugating machine, cheap in construction, easily handled, and not liable to get out of order.

The invention consists in the improved wire corrugating machine and the combination and arrangements of the various parts, as will be hereinafter more fully described and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views: Figure 1 is a top plan view of my improved machine. Fig. 2 is a sectional view on line *x*. Fig. 1. Fig. 3 is an end elevation, and Figs. 4. 5 and 6. are diagrams indicating the manner in which corrugations of various forms may be produced.

In said drawings *a*, represents a guide block or equivalent device through which the wire to be corrugated is fed. This guide block is fixed to a sliding or traveling carriage *b*, supported at each end on axles or spindles *c*, *c*, and operated by the to and fro motion of lever *d*, pivoted on bolt or stud *e*. The movement of lever *d*, is effected by switch *f*, *f*, the ends of which are respectively in contact with cams *g*. *g'*, rotated by shaft *h*. upon which they are mounted. The shaft *h*. is driven by a hand wheel or pulley as required. The toothed wheel *i*. on axle *k*. is caused to revolve by ratchet wheel *l*. actuated by pawl *m*, on lever *n*. The lever *n*. centered on axle *o*. has intermittent movement imparted to it by the pin *p*. on shaft *h*. so that at every turn of the driving wheel and consequently of shaft *h*. the pawl *m*. and ratchet *l*, are thrown alternately in and out of gear, and the toothed wheel *i*. on axle *k*. is simultaneously rotated, drawing forward around or between its teeth the wire which is fed through the guide block *a*. The rotation of shaft *h*, likewise gives motion to cams *g*. *g'*. causing switch *f*, *f*, to sway lever *d*, to and fro and thus carry the traveling carriage *b*, holding guide block *a*. from side to side of the toothed or corrugating wheel *i*. The extent of the to and fro motion of lever *d*, is regulated by the pin or bolt *r*. sliding in the slot *s*. in said lever *d*. The wire, after passing around the teeth of the corrugating wheel *i*, is delivered through the slots or equivalent devices *q*. fixed to bracket *w*. The passage of the wire around the teeth of the corrugating wheel *i*. during the operation is further illustrated by the diagrams Figs. 4, 5, and 6.

Any particular form or size of corrugation required in the wire under treatment may be produced by simply changing the toothed wheel or pinion *i*, which may, if desired be substituted as indicated by Fig. 6. by a wheel having round or other shaped pins in its periphery instead of teeth as in Figs. 4 and 5. In Fig. 5 the guide block *a*, through the bore of which the wire passes, is represented in both positions, to show the extent of its to and fro movement, being in dotted lines on one side of wheel *i*. and in full, on the opposite side. To prevent the wire being displaced from wheel *i*, during the operation of corrugating, the shield of cover *t*, (shown in Figs. 1, 2 and 3) is used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wire corrugating machine the combination with a frame, of a traveling or sliding carriage, adapted to reciprocate in said frame, a guide block or equivalent feeding device secured to said sliding carriage, a lever pivoted at one end to the frame and adapted to control the movement of said sliding carriage, a switch secured to said lever, a cam-carrying shaft adapted to control through said switch the movement of the said lever, a corrugating wheel arranged opposite the guide block, and means for transmitting the motion

of the cam-carrying shaft to the said corrugating wheel, substantially as described and for the purposes set forth.

2. In a wire corrugating machine, the combination with a frame, of a shaft adapted to revolve in said frame, a corrugating wheel secured to said shaft, a guide block or equivalent feeding device adapted to reciprocate in said frame, an oscillating lever controlling the movement of said feeding device, a switch secured to said lever, a cam-carrying shaft adapted to control the movement of said switch, means for regulating the traveling distance of the sliding carriage, and means for transmitting the motion of said cam-carrying shaft to the corrugating wheel carrying shaft, substantially as described and for the purposes set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CARL SCHOLL.

Witnesses:
LOUIS STUNOHL,
ALBERT STUNOHL.