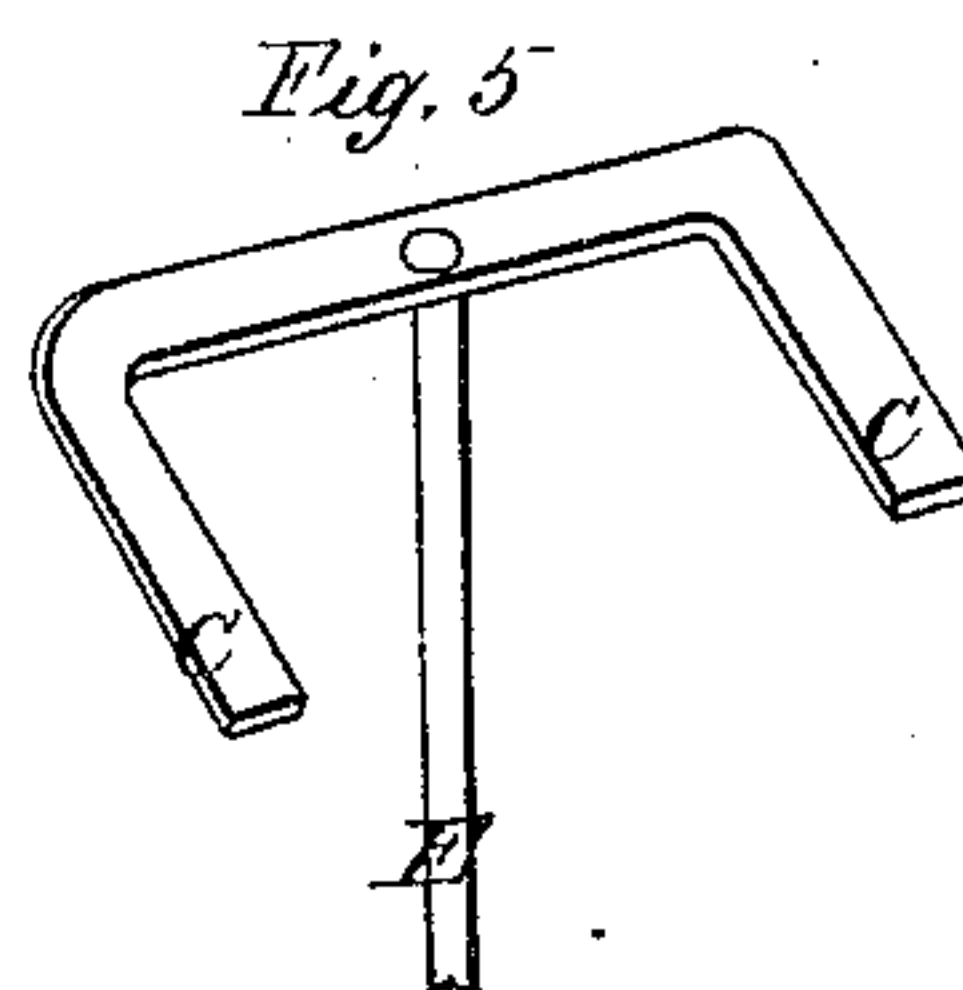
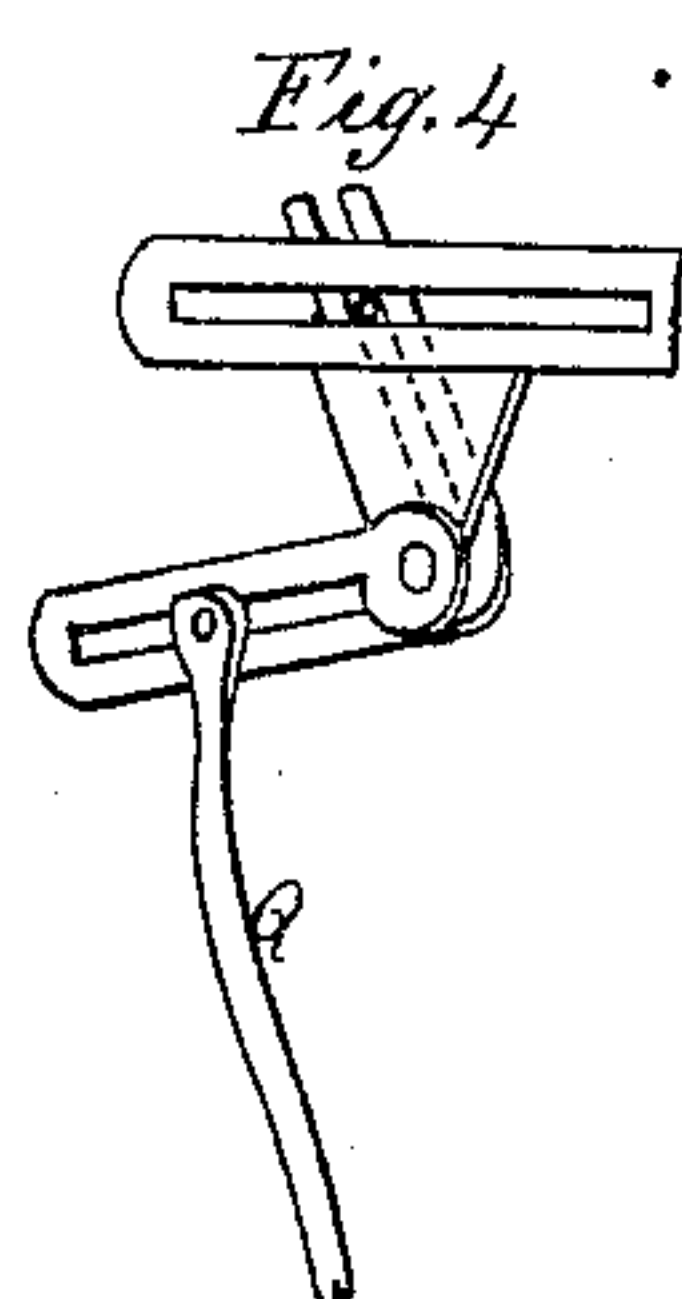
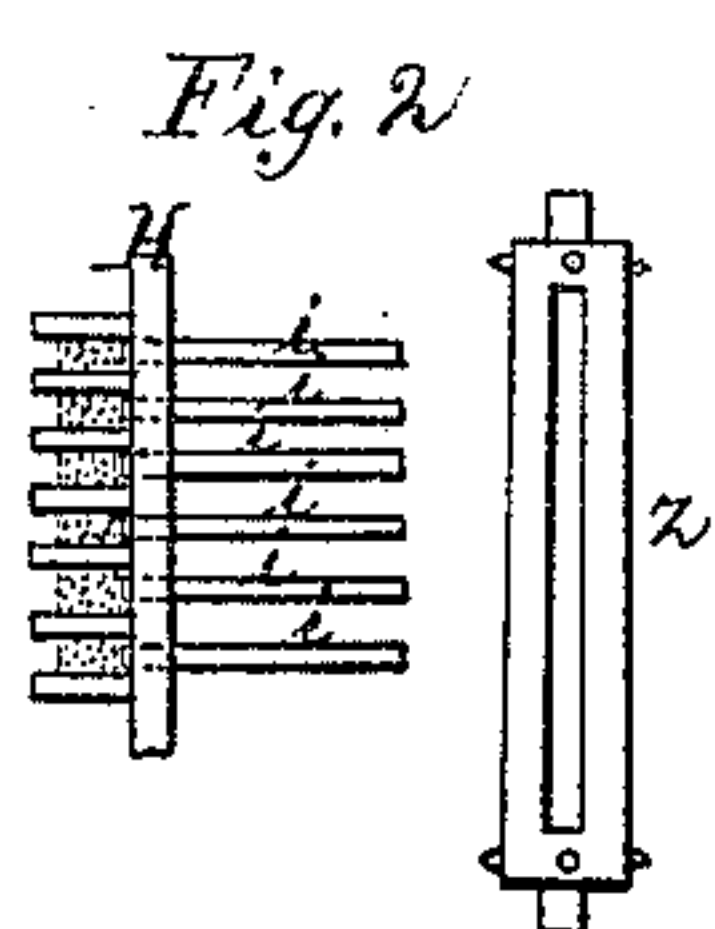
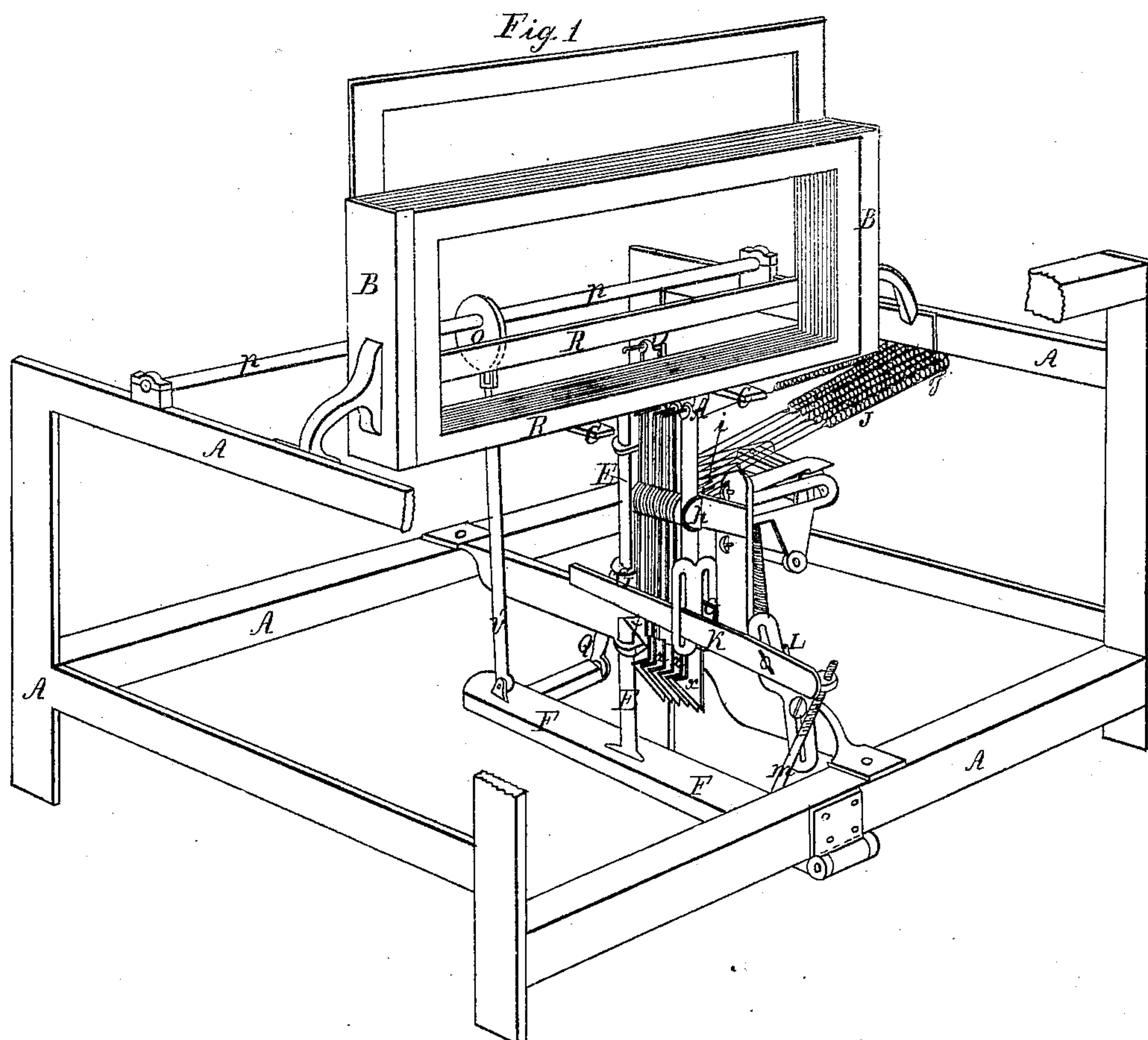


J. Pender
Shedding.

N^o 10,137.

Patented Oct. 18, 1853.



UNITED STATES PATENT OFFICE.

JOHN PENDER, OF WORCESTER, MASSACHUSETTS.

POWER-LOOM.

Specification of Letters Patent No. 10,137, dated October 18, 1853.

To all whom it may concern:

Be it known that I, JOHN PENDER, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in the Mode of Operating the Harness or Heddles of Power-Looms; and I hereby declare the following to be a full and clear description thereof, reference being had to the drawings herewith presented, which drawings constitute a part of said description, as follows.

The nature of my invention consists in so arranging the harness or heddles of said loom that they will play up and down in a guide, and rest on a positive foundation. See the drawing.

Figure 1 is an oblique view of the loom with part of the frame removed in order to show the interior and moving parts. (A A A) is the frame, (B B) are the standard guides in which slide the harness frames R R, and (C C) are the rest supported on the pillar (E). The harness shafts fall upon this rest whenever they are let down. The pillar (E) is supported on the lever (F) at the bottom of the frame, which lever is moved up and down by the eccentric cam (o) on the shaft (p) with its pitmen (v).

Fig. 3 shows the form of the jack (x). The jacks are attached to the harness frames and hang downward to the lever (K) through the rack (H) which is fixed on the standing part of the frame. This rack has also a set of pins (i i i,) which slip freely through its bar and coming against the back of each jack. The dotted spaces at Fig. 2 show the section of each jack when at rest.

The object of this pin is to enable the card to bring the jack forward so as to be taken up by the lever K. Each jack has a small spiral spring (F,) attached so as to bring back the jack and its pin into place when the card recedes; so that all the jacks and heddles remain at rest until the pattern requires one or more to be raised, and then by the card pressing the pin against the jack it is taken up by the lever (K). This has its fulcrum at the stud (L) fixed in the frame and is moved by the rod (m,) connecting it to lever (F,) so that the arm of lever (K) which lifts the jack, vibrates downward when the lever (F) rises and vice versa. Each jack being attached to one frame or leaf of harness independent of each other it follows that when the pattern requires any one to be raised the jacquard pushes the jack forward at the proper time by the pin (i,) and it is taken up by lever (K). The common jacquard loom is too well known to require any particular description of its nature or its construction and movements, as these need not differ from the ordinary construction.

What I claim as my invention and desire to secure by Letters Patent is—

The rest C, C, in combination with the guides B, B, when constructed substantially as above described.

In testimony whereof I hereto subscribe my name in presence of two witnesses.

JOHN PENDER.

Witnesses:

WM. DICKINSON,
CLARENDON HARRIS.