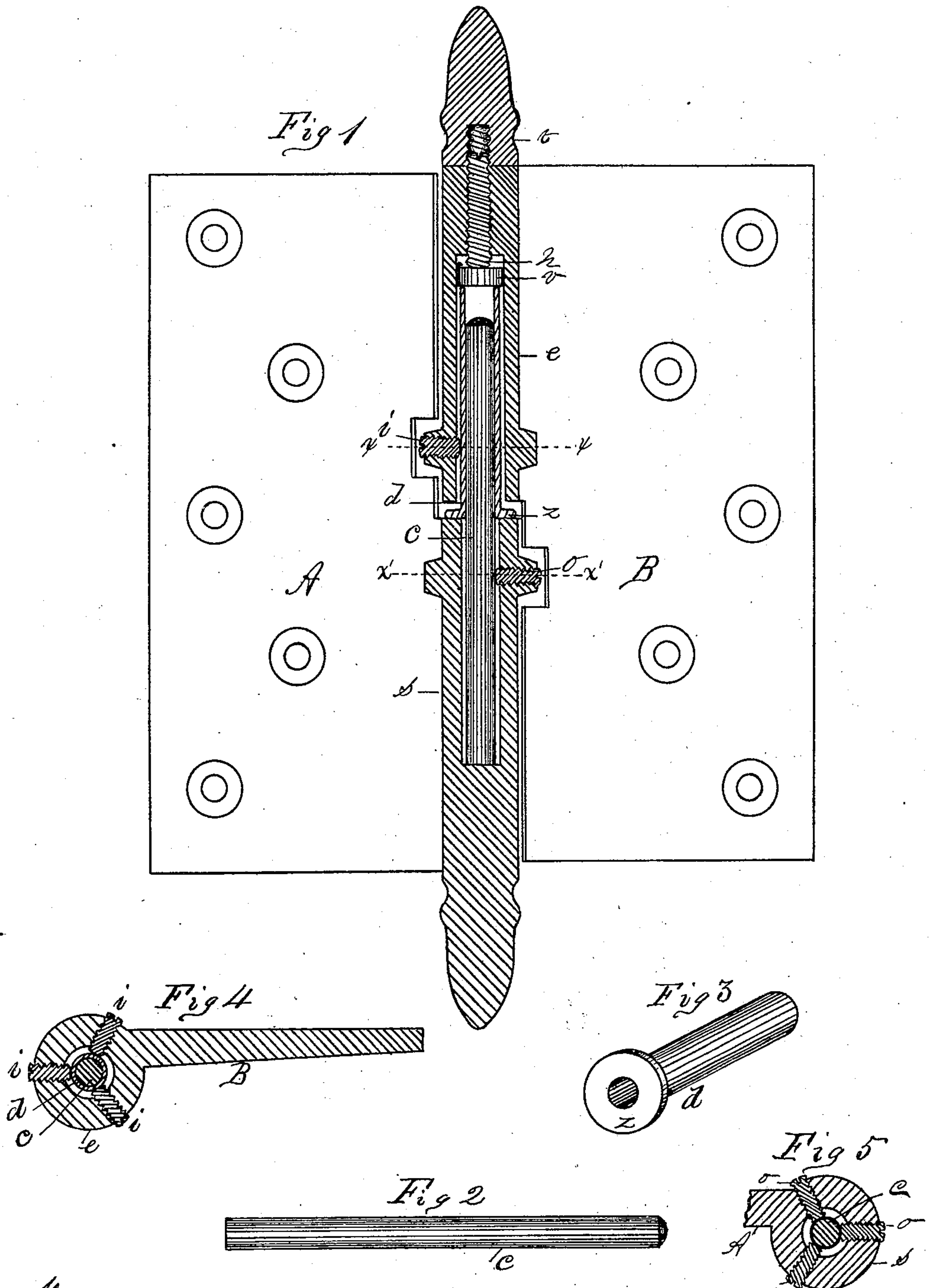


(No Model.)

C. H. BAUSH & J. M. FLEMING.  
Hinge.

No. 241,280.

Patented May 10, 1881.



Witnesses  
J. D. Garfield  
G. V. Bowers

Inventors  
Christian H. Baush  
John M. Fleming  
By Henry A. Chapman  
Att'y



# UNITED STATES PATENT OFFICE.

CHRISTIAN H. BAUSH AND JOHN M. FLEMING, OF HOLYOKE, MASS.

## HINGE.

SPECIFICATION forming part of Letters Patent No. 241,280, dated May 10, 1881.

Application filed March 25, 1881. (No model.)

*To all whom it may concern :*

Be it known that we, CHRISTIAN H. BAUSH, and JOHN M. FLEMING, citizens of the United States, residing at Holyoke, in the county of Hampden and State of Massachusetts, have jointly invented new and useful Improvements in Adjustable Door-Butts, of which the following is a specification.

This invention relates to the construction of door-butts in which the cylindrical pintle-sockets are made larger than the ends of the pintles, and are provided with transversely-operating screws to set the ends of said pintles within their sockets more or less out of line therein, and also to butts having fitted into the upper pintle-socket a cylindrical sleeve to receive the upper end of the pintle and to bear the weight of the door by means of a screw operating against its upper end, the object being to provide door-butts so constructed that a door hung upon them can be easily and quickly adjusted within the door-casing in case of shrinkage or settling of parts or other derangement, so that it will swing clear and properly fit the casing without removing the butts or unhooking the door.

In the drawings forming part of this specification, Figure 1 is a front elevation, partly in section, of our improved butt. Fig. 2 is the pintle separate from the butt. Fig. 3 is the pintle-sleeve separate from the butt. Fig. 4 is a transverse section through the leaf B on the line  $x x$ , Fig. 1. Fig. 5 is a transverse section through socket  $s$  on line  $x'$ , Fig. 1.

In the drawings, A is the pintle-leaf of the butt. B is the socket-leaf.  $c$  is the pintle.  $d$  is the pintle-sleeve.  $e$  is the pintle-sleeve socket on leaf B.  $i i$  are adjusting-screws in the socket  $e$ .  $o o$  are adjusting-screws in the pintle-socket on leaf A.

Like letters refer to like parts in the several figures.

The adjustment of doors within their casings, when the latter have become shrunken or out of place from the settling of certain parts of a house, so that they will swing free and clear, often occasions great inconvenience, and particularly so if the doors are large and heavy, as when hung with butts of ordinary construction such doors must be unhooked for the purpose of adjusting them in their casings; but doors hung with our improved butts, as herein described,

can be easily adjusted without unhooking them or removing the butts.

We construct our butts by forming a pintle-socket on one or both of the leaves thereof larger than the end of the pintle which is to operate therein. In Fig. 1 is shown, upon leaf A, the socket  $s$ , to receive the lower end of the pintle  $c$ . In the sides of socket  $s$  are the adjusting-screws  $o$ , whose inner ends project beyond the inner face of said socket, and are adapted to be screwed against the lower part of pintle  $c$  within it to cause it to stand centrally within said socket or nearer to one side than to the other. The upper end of said pintle has fitted to it a pintle-sleeve,  $d$ , which is a little longer than said upper end above socket  $s$ , and which has a collar,  $z$ , on its lower end, which bears upon the upper end of socket  $s$ , as seen in Fig. 1. The socket  $e$  on leaf B is made to receive the sleeve  $d$  very freely, so that it may be moved and adjusted laterally therein. For this purpose said socket  $e$  has, like socket  $s$ , in it the adjusting-screws  $i$ , which operate against the sides of the sleeve  $d$ , as do screws  $o$  against pintle  $c$ , as above described. In the upper end of socket  $e$  is a screw,  $n$ , working vertically therein against a flat washer,  $v$ , within socket  $e$  and above the end of sleeve  $d$ . An ornamental lock-nut,  $t$ , screws onto the upper end of screw  $n$ , and retains it in such position as it may have been left in.

By the foregoing description it will be seen that the pintle  $c$  may be adjusted in its socket in leaf A in a certain direction, and that sleeve  $d$  may be adjusted within socket  $e$ , so that leaf B takes a position which is the result of a double adjustment. This may be desirable where a door requires more than ordinary change to cause it to swing properly; but ordinarily all requisite adjustment may be obtained from such lateral movement of the sleeve  $d$  within socket  $e$  as may be arranged for in its construction.

The operation of adjusting a door hung on our improved butts is as follows: If the door requires to be raised bodily the lock-nut  $t$  is removed and screw  $n$  is turned against washer  $v$ , which, bearing upon the end of sleeve  $d$ , causes the door to be lifted up, when nut  $t$  is replaced, and thus the weight of the door is thrown upon the end of sleeve  $d$ , and washer  $v$  being between it and the lower end of screw  $n$ , the door may be swung freely without dan-

ger of changing the position of said screw or occasioning any great wear of parts. Should the butt edge of the door require to be moved toward or from the casing, screws *i* in socket 5 *e* are so turned against sleeve *d* as to force the butt leaf or leaves which are screwed to the door to such altered position relative to the sleeve *d* and the end of pintle *c* within it as will bring said butt edge of the door to the 10 proper position.

What we claim as our invention is—

1. In a door-butt, the combination, with the leaf B, provided with the cylindrical pintle-socket *e*, of the cylindrical pintle-sleeve *d*, fitted loosely in said socket, the screws *i*, the 15 washer *v*, and the screw *n*, substantially as and for the purpose set forth.

2. The within-described improved door-butt, consisting of the leaf A, having a pintle-socket 20 of larger diameter than the lower end of the

pintle *c*, and provided with the adjusting-screws *o* and the leaf B, whose socket *e* is of larger diameter than that of sleeve *d*, and is provided with the adjusting-screws *i*, in combination with the pintle *c* and sleeve *d*, substantially as 25 and for the purpose set forth.

3. In a door-butt, the combination, with pintle *c*, of the leaf A, having a pintle-socket of larger diameter than the lower end of said pintle, and provided with the adjusting-screws *o*, 30 substantially as and for the purpose set forth.

4. In combination with the sleeve *d* and the socket *e* on leaf B, the adjusting-screw *n*, the washer *v*, and lock-nut *t*, substantially as and for the purpose set forth.

CHRISTIAN H. BAUSH.  
JOHN M. FLEMING.

Witnesses:

H. A. CHAPIN,  
J. D. GARFIELD.