

(No Model.)

C. W. PRESTON.
COMBINATION GAGE.

No. 504,278.

Patented Aug. 29, 1893.

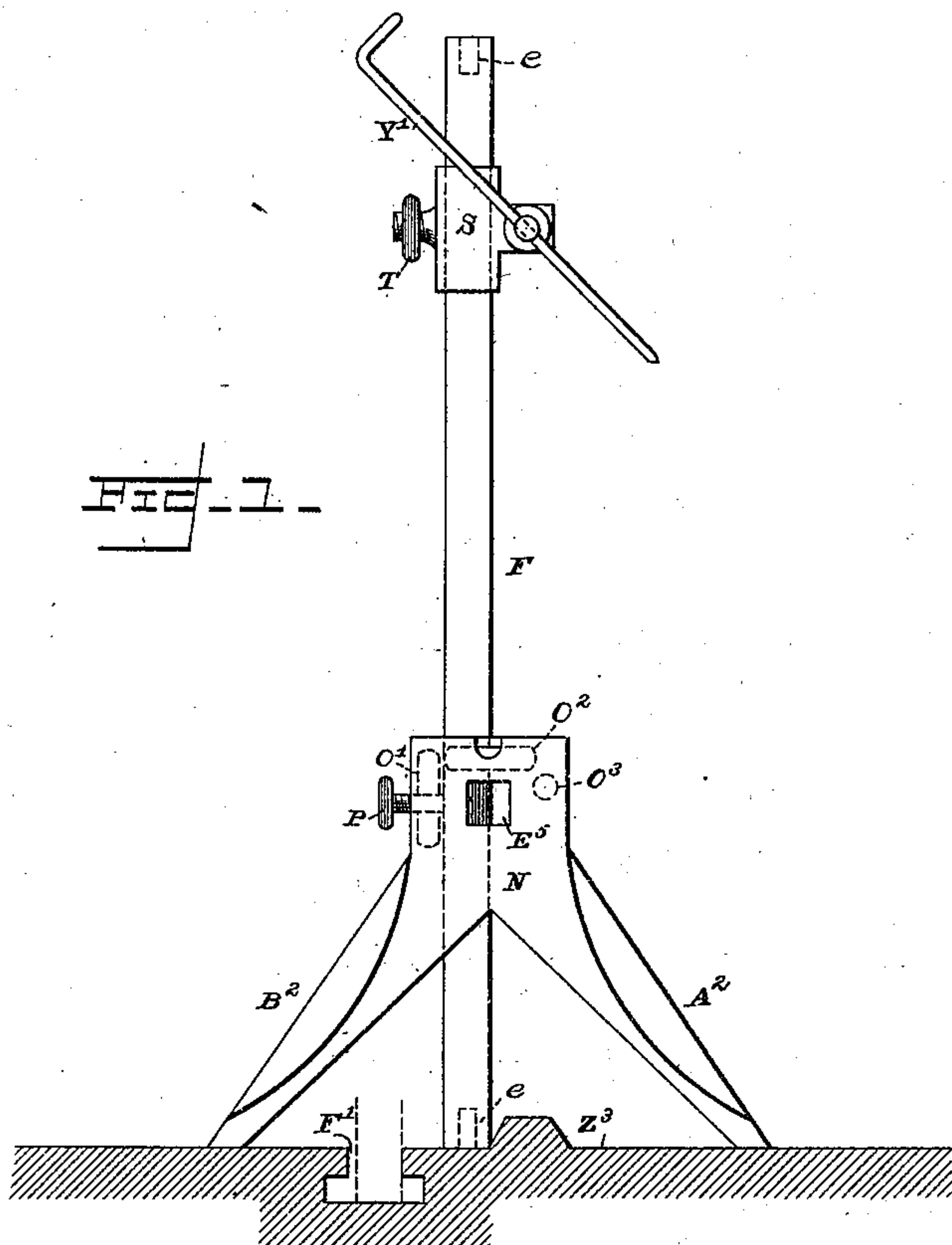
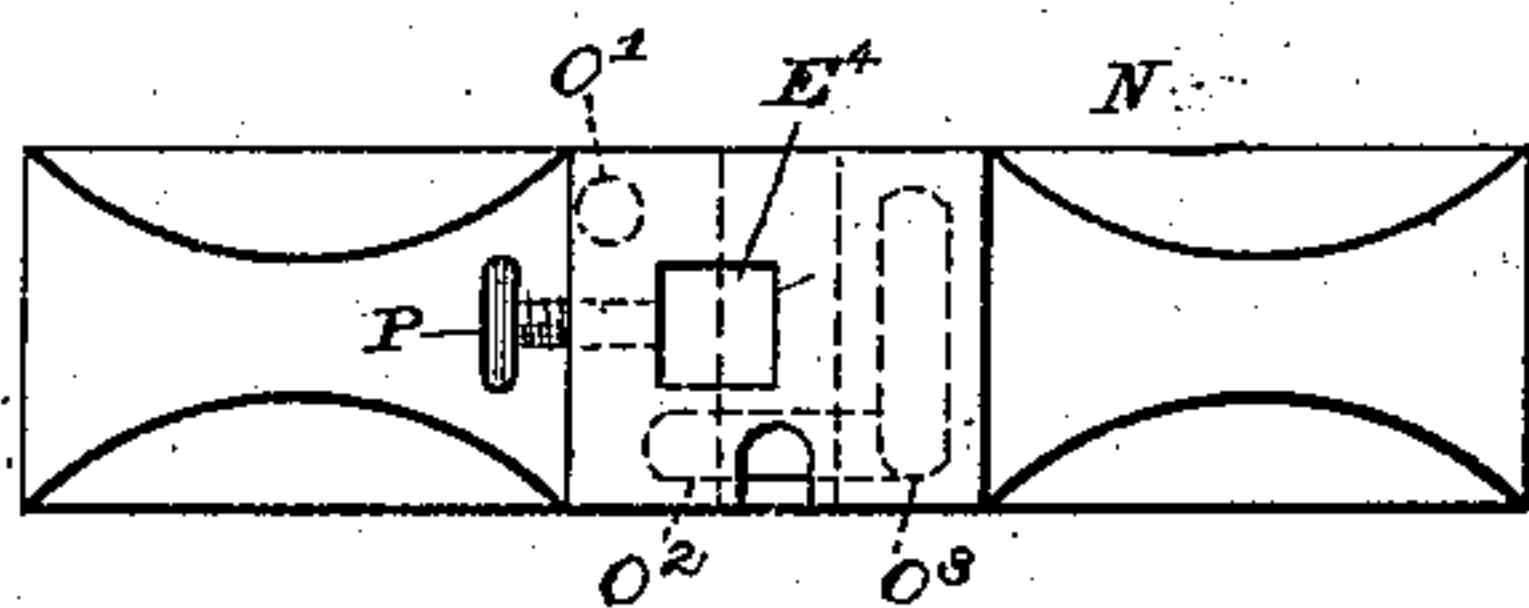


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES W. PRESTON, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF
ONE-HALF TO WILLIAM C. ESPEY AND WALTER E. ANDERSSON, OF
SAME PLACE.

COMBINATION-GAGE.

SPECIFICATION forming part of Letters Patent No. 504,278, dated August 29, 1893.

Original application filed April 7, 1892, Serial No. 428,243. Divided and this application filed November 1, 1892. Serial
No. 450,660. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. PRESTON, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Combination Im-
plements; and I do hereby declare the follow-
ing to be a full, clear, and exact description of
the invention, such as will enable others skilled
in the art to which it appertains to make and
use the same.

This invention refers to an implement or
combination tool, consisting of a number of
elements or mechanical parts adapted for com-
bination and connection by arrangement and
adjustment so as to perform a great variety
of different functions, such as are required in
testing, adjusting and laying out mechanical
work of various sorts, the object of the inven-
tion being to provide a simple and convenient
device which may be useful for various pur-
poses, and the invention consists in the con-
struction, arrangement and combination of
parts, substantially as will be hereinafter de-
scribed and claimed.

In another pending application, filed April
7, 1892, Serial No. 428,243, of which applica-
tion the present one is a division, I have de-
scribed and claimed a form of my improved
combination implement which is adapted for
use on plain surfaces. The form of the im-
plement included in the present case is adapt-
ed for use on curved surfaces. This distinc-
tion between the two forms will be borne in
mind in the construction of their various pe-
culiarities and details.

In the accompanying drawings illustrating
my invention: Figure 1 is an end elevation,
the scale bar being located in a vertical posi-
tion and the implement serving as a surface
gage employed in marking or determining dis-
tances with respect to planes or parallel sur-
faces, horizontal, vertical, or angular. Fig. 2
is a top plan view of the main stock or head.

Similar letters of reference designate corre-
sponding parts throughout all the different
figures of the drawings.

F denotes a bar of rectangular form, its
sides being parallel and straight and one or

more of them being graduated and provided
with a suitable scale to enable the bar to be
easily adjusted and placed in use, and it is
whenever practicable, set so that its corners
will come in contact with the work, thus giv-
ing a clear line of light in setting. This grad-
uated rectangular bar F is provided at its ends
with screw-holes *e e* to receive the screws Q
which are employed in protecting the ends of
the scale bar from injury when in use and for
various other purposes. The screw holes *e e*
are adapted to receive lathe points when so
required.

N denotes one of the main stocks, heads or
bases of this form of my improved combina-
tion implement. I employ one or more of these
main stocks N as occasion and circumstances
require. The stock N is shown in elevation
in Fig. 1 and in top plan view in Fig. 2. It
has a main body and two inclined legs. The
two legs have the faces A^2 and B^2 which are
flat and are situated preferably at an angle
of about ninety degrees to each other. These
legs are adapted to partially inclose any cylin-
drical surface to which the implement may be
applied, as shown in Fig. 1. The main body
of the stock N is provided with a vertical spirit
level O' and two horizontal spirit levels O^2 and
 O^3 . It is also furnished with a horizontal slot
or mortise E^5 , and a vertical slot or mortise E^4 ,
together with a set-screw P, located and ar-
ranged so as to serve to clamp or hold the
scale bar F whenever it is inserted into either
of the mortises E^4 or E^5 .

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

1. In a combination implement, a stock or
head provided with angular faces which may
rest upon cylindrical forms and provided with
mortises or seats for receiving a scale bar par-
allel to or transversely to the axis of any cy-
lindrical form to which the stock or head may
be applied and a clamping means for holding
the bar in position and permitting its lineal
adjustment, substantially in the manner and
for the purposes as set forth.

2. In a combination implement, the main
stock provided with the angular projections

having faces at right angles to each other and provided also with mortises or seats at right angles to each other, in combination with the scale bar adapted to be received into and held
5 adjustably within said mortises, substantially in the manner and for the purposes indicated.

3. In a combination implement, the head N, having the angular faces A^2 B^2 and the mortises or seats E^4 and E^5 , in combination with
10 the scale bar F, substantially as described.

4. The main stock N, having the faces A^2

and B^2 at right angles to each other and having also the vertical mortise E^4 , horizontal mortise E^5 , clamping screw P and vertical and horizontal levels, all in combination with the
15 scale bar, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. PRESTON.

Witnesses:

ALFRED A. ENQUIST,

WILSON D. BENT, Jr.