

July 23, 1929.

E. McCLURE

1,721,601

METAL BENCH

Filed Nov. 14, 1927

Fig. 1.

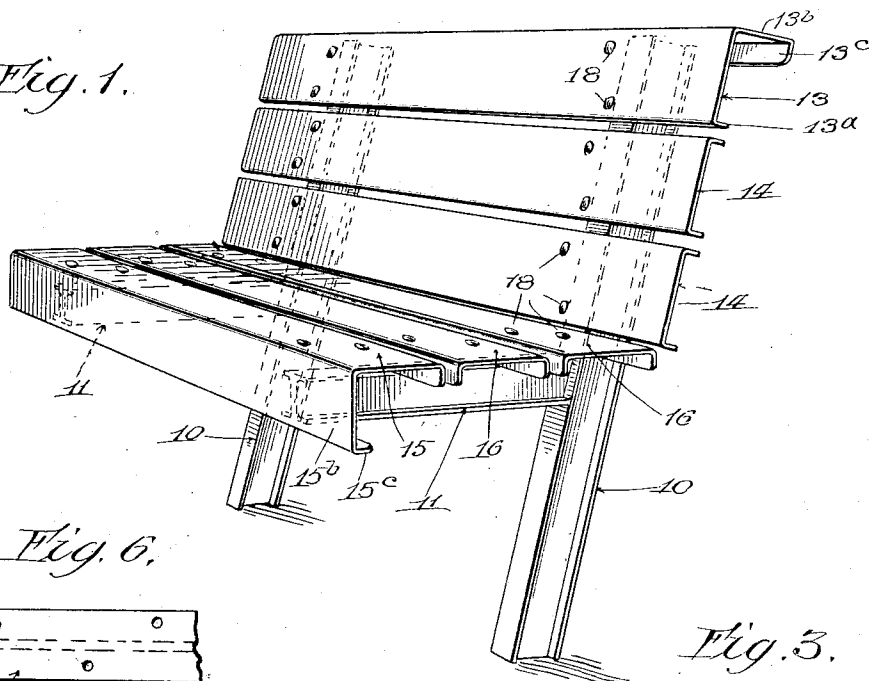


Fig. 6.

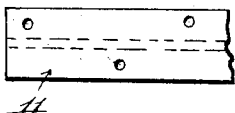


Fig. 3.

Fig. 2.

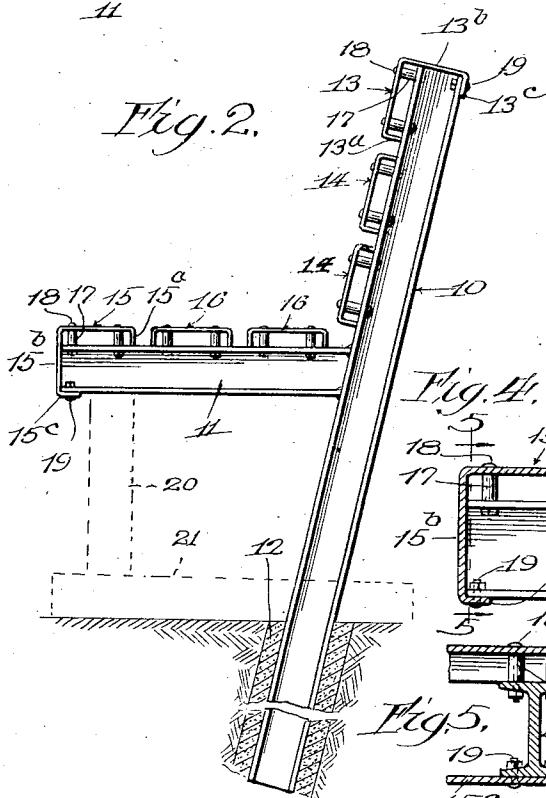


Fig. 4.

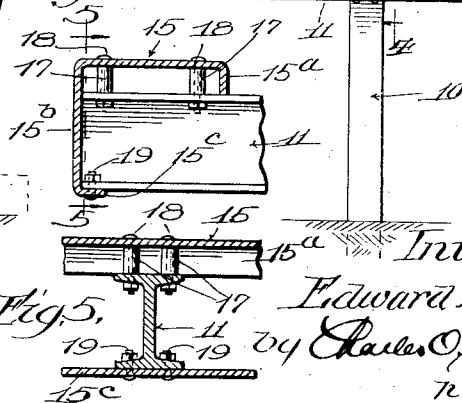
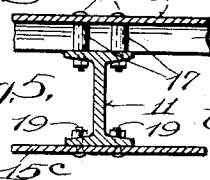


Fig. 5.



Inventor:
Edward McClure,
Charles O. Sherry,
his Att'y.

UNITED STATES PATENT OFFICE.

EDWARD McCLURE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANKLIN P. SMITH, OF CHICAGO, ILLINOIS.

METAL BENCH.

Application filed November 14, 1927. Serial No. 232,971.

This invention relates to metal benches or
settees and its principal object is to provide
a strong and substantial metal bench or
settee of neat and attractive appearance. It
is well known that wooden benches, espe-
cially those used in parks and other public
places are very unsatisfactory because they
are easily destroyed by mischievous persons.
The ordinary metal benches are not satis-
factory because they are easily tipped over
and apt to be broken.

The bench forming the subject matter of
this specification is formed of structural-
metal supporting members and metal slats,
which form the seat and back and are spaced
from the supporting members and bolted or
otherwise secured thereto, certain of said
slats having webs or flanges which project
over the ends of the supporting members so
as to give a finished and attractive appear-
ance to the bench. The invention consists
in the several novel features hereinafter
fully set forth and claimed.

The invention is clearly illustrated in
the drawing accompanying this specifica-
tion, in which:

Fig. 1 is a perspective view of a metal
bench embodying a simple form of the pres-
ent invention; Fig. 2 is a side elevation
thereof; Fig. 3 is a front elevation thereof
partly broken away; Fig. 4 is a detail ver-
tical fragmental cross section taken on the
line 4—4 of Fig. 3; Fig. 5 is a detail ver-
tical fragmental longitudinal section taken on the
line 5—5 of Fig. 4 and Fig. 6 is a detail plan
of a fragment of one of the seat supporting
members.

Referring to said drawing, which illus-
trates one embodiment of the present inven-
tion, the reference characters 10, 10 design-
ate the main supporting members or legs
of the bench and 11, 11 designate the hori-
zontal seat supporting members. Conven-
iently the legs and seat supporting members
are formed of structural metal, such as I
beams, T's, angles, channels and round or
square pipes of suitable dimensions and each
one of the seat supporting members is
welded or otherwise rigidly secured to one
of the legs at the proper height to sustain
the seat. In some instances the legs are
made relatively long and are sunk into holes
formed in the earth and cement concrete 12

is filled in the holes around the lower ends
of the legs thus providing a very substan-
tial support for the entire bench.

Bolted or otherwise secured to the legs
10 and seat supporting members 11, are slats
13, 14, 15, 16, which extend lengthwise of
the bench and form the back and seat por-
tions thereof. The body portions of the
slats are raised from the supporting mem-
bers and are spaced therefrom as for in-
stance by short sleeves 17 that surround the
bolts 18, which secure the slats to the sup-
porting members. The slats, and in some
instances the supporting members 10, 11, are
formed with bolt holes for the reception of
the bolts 18, and nuts are secured upon the
threaded ends of the bolts and bear against
the undersides of the supporting members.
When I beams or other flanged supporting
members are used, the bolt holes are formed
in the flanges thereof as shown in Fig. 6.
Obviously other forms of connecting means
may be employed for securing the slats to
the supporting members, but the one shown
provides simple means whereby the parts
may be shipped in a knocked down condition
and assembled at the place where the
benches are to be used. Moreover this ar-
rangement provides means whereby any slat
may be readily removed from the bench and
replaced by another.

As a preference the intermediate slats 14, 15
are in the form of channels arranged
with their flanges turned towards the sup-
porting members and engaging therewith if
desired. The end slats 13, 16 also are pro-
vided with flanges 13^a, 16^a which are turned
towards the supporting members and may
engage therewith, and said end slats are
formed with other webs or flanges 13^b, 16^b
which overhang the adjacent ends of the
supporting members 10, 11 so as to cover
them and give an improved and attractive
appearance to the top and front of the
bench. Narrow flanges 13^c, 16^c are formed
along the edge portions of the flanges 13^b,
16^b and said narrow flanges 13^c, 16^c are bolt-
ed to the other flanges of the supporting
members by bolts 19 or otherwise secured
thereto as may be desired. The body por-
tions of the slats (which form the back of
the bench) are all arranged in a single
plane, parallel with the legs 10, and the body

portions of the slats (which form the seat) also are arranged in a single plane parallel with the seat supporting members 11. The slats are all spaced apart, although the spaces are made rather narrow so as to prevent objects from being placed between the slats by mischievous persons in an attempt to pry them apart.

The flanges of the slats give great strength to the slats, whereby comparatively light material may be used in forming the back and seat portions. The bench may be made of any convenient length and if desired more than two sets of supporting members may be employed for supporting an extremely long bench.

With the use of a pair of legs as shown, it is an easy matter to run a lawn mower under the bench for the purpose of cutting the grass and although I prefer to use supporting legs only at the back of the bench, it is quite obvious that short supporting legs may be provided at the front of the bench and connected to the rear supporting legs by horizontal base members as shown by the dotted lines 20, 21 in Fig. 2.

More or less variation of the exact details of construction is possible without departing from the spirit of this invention; I desire, therefore, not to limit myself to the exact form of the construction shown and described, but intend, in the following claims to point out all of the invention disclosed herein.

I claim as new, and desire to secure by Letters Patent:

1. A metal bench comprising a plurality of upwardly extending, main supporting members forming the legs of the bench, a plurality of seat supporting members fixedly secured thereto and projecting horizontally therefrom, and channel shaped metal slats fixedly secured to said upwardly extending and horizontally extending supporting members with their body portions spaced away therefrom and forming the back and seat portions of the bench, the end slats having bent up flanges overlying the adjacent

ends of the supporting members and being fixedly secured thereto.

2. A metal bench comprising a plurality of flanged upwardly extending main supporting members forming the legs of the bench, a plurality of flanged horizontally extending members welded to the legs and forming the seat supporting members of the bench, channel shaped metal slats extending across said legs and across said seat supporting members, bolts connecting the slats with the legs and seat supporting members and spacers surrounding the bolts and spacing the body portions of the slats away therefrom, the end slats having flanges overlying the adjacent ends of the legs and seat supporting members and having bent up edge portions bolted thereto.

3. A metal bench comprising a plurality of I beam members forming the legs of the bench, a plurality of horizontally extending I beam members welded to the legs and forming the seat supporting members of the bench, and channel shaped metal slats extending across said legs and across said seat supporting members, and bolted thereto with the body portions of the slats spaced away from said legs and seat supporting members, the end slats having flanges overlying the adjacent ends of the legs and seat supporting members, and formed with bent up edge portions bolted thereto.

4. A metal bench comprising a plurality of I beam members forming the legs of the bench, a plurality of horizontally extending I beam members welded to the legs and forming the seat supporting members of the bench, channel shaped metal slats extending across said legs and across said seat supporting members, bolts connecting the slats with the legs and seat supporting members and spacers surrounding the bolts and spacing the body portions of the slats away therefrom, the end slats having flanges overlying the adjacent ends of the legs and seat supporting members and having bent up edge portions bolted thereto.

EDWARD McCLURE.