

COMBINATION OF PEN AND CHOPSTICK

The invention relates to a pen device, more particularly to a combination of pen and chopstick.

Referring to Figures 1 to 3, a conventional pen and chopstick assembly 1 disclosed in Taiwanese Patent Number TW M338022 includes a connecting body 11 having a first end portion 111 and an opposite second end portion 112, an outer sleeve tube 12 fixed to the outer periphery of the connecting body 11, a nip holder 13 connected to the first end portion 111, a pen core 14 received in the connecting body 11 and extending out of the nip holder 13, a chopstick rod 15 connected to the second end portion 112, and a tubular pen body 16 operable to engage the outer periphery of one of the nip holder 13 and the chopstick rod 15.

The first end portion 111 is formed with a connector thread 113 and a first thread 114, and the second end portion 112 is formed with a second thread 115, a chopstick engaging thread 116 and a sealing end 117. The nip holder 13 is connected to the connector thread 113. The pen core 14 includes a tail portion 141 abutting against the sealing end 117, and a nip portion 142 disposed opposite to the tail portion 141 and protruding beyond the nip holder 13. The chopstick rod 15 is connected to the chopstick engaging thread 116 of the connecting body 11. The tubular pen body 16 is operable to be connected to one of the first thread 114 and the

second thread 115 of the connecting body 11.

In a use state, the tubular pen body 16 is connected threadedly to the second thread 115 so that the tubular pen body 16 covers the outer periphery of the chopstick rod 15 and exposes the nip holder 13. Hence, the pen and chopstick assembly 1 can be used for writing. For dining, the tubular pen body 16 is connected to the first thread 114 so that the tubular pen body 16 covers the outer periphery of the nip holder 13 and exposes the chopstick rod 15. Therefore, the pen and chopstick assembly 1 can be used for eating.

For assembly, the pen core 14 is received in the connecting body 11 and the tail portion is placed in abutment with the sealing end 117. To protrude the nip 142 outwardly from the nip holder 13, the length of the pen core 14 must be dimensioned precisely to correspond to a distance between the nip holder 13 and the sealing end 117. If the distance is too long or too short, the outward protruding length of the nip 142 of the pen core 14 will be excessive or insufficient. Due to a need to meet the precision requirement, the cost for manufacturing the pen and chopstick assembly 1, is relatively high.

An object of this invention is to provide a combination of pen and chopstick, which can be manufactured at low costs.

According to the present invention, a combination

of pen and chopstick comprises a hollow connecting body,
an extension tube, a biasing member, a nip holder, a
pen core, a chopstick, and a tubular pen body. The
hollow connecting body has opposite first and second
5 end portions. The first end portion has a nib
holder-engaging thread and a first thread. The second
end portion has a chopstick engaging thread and a second
thread. The extension tube is connected to the second
end portion. The biasing member is disposed in the
10 extension tube. The nip holder is connected to the nib
holder-engaging thread. A pen core is received in the
connecting body and the extension tube, and includes
a tail portion abutting against the biasing member,
and a nip extending into the nib holder. The tail
15 portion is biased by the biasing member to push the
nib out of the nip holder. The chopstick is connected
threadedly to the chopstick engaging thread. The
tubular pen body is selectively connectable to one of
the first and second threads. The tubular pen body
20 covers the chopstick and exposes the nip holder when
connected threadedly to the second thread, and covers
the nip holder and exposes the chopstick when connected
threadedly to the first thread.

Other features and advantages of the present
25 invention will become apparent in the following
detailed description of the preferred embodiment with
reference to the accompanying drawings, of which:

Figure 1 is an exploded view of a conventional pen and chopstick assembly disclosed in Taiwanese Patent Number TW M338022;

Figure 2 is a side sectional view of the conventional pen and chopstick assembly in a state of use as a pen;

Figure 3 is a side sectional view of the conventional pen and chopstick assembly in a state of use as a chopstick;

Figure 4 is an exploded perspective view of the preferred embodiment of a combination of pen and chopstick according to the present invention;

Figure 5 is an exploded sectional view of the preferred embodiment;

Figure 6 is a side sectional view of the preferred embodiment in a state of use as a pen; and

Figure 7 is a side sectional view of the preferred embodiment in a state of use as a chopstick.

Referring to Figures 4 and 5, a preferred embodiment of a combination pen and chopstick according to this invention is shown to include a connecting unit 2, a nip holder 3, a pen core 4, a chopstick 5, a fluid seal 6, a tubular pen body 7, and a cap 8.

The connecting unit 2 includes a hollow connecting body 21 having first and second end portions 24, 25, an extension tube 22 connected to the connecting body 21, and a biasing member 23 disposed in the extension tube 22.

The connecting body 21 is a multi-component body that includes an inner tube 211, an outer tube 212 surrounding the inner tube 211, a nip holder connector 241 disposed in the first end portion 24 between the inner and outer tubes 211, 212, a sleeve 255 disposed in the second end portion 25 between the inner and outer tubes 211, 212, a chopstick connector 256 inserted into the sleeve 255.

The first end portion 24 of the connecting body 21 has a nip holder-engaging thread 243 formed in the nip holder connector 241, and a first thread 244 formed on an inner peripheral face of the outer tube 212. The second end portion 25 has a chopstick engaging thread 253 formed on the chopstick connector 256, and a second thread 254 formed on an inner peripheral face of the outer tube ring 212. The sleeve 255 has a cone-shaped section 257. The extension tube 22 is connected to the second end portion 25 by extending into the chopstick connector 256. The biasing member 23 is a compression spring and is positioned to a spring retainer 231 fixed inside the extension tube 22.

The nip holder 3 is a hollow block connected threadedly to the nip holder-engaging thread 243 of the connecting body 21.

The pen core 4 is disposed inside the connecting body 21 and the extension tube 22, and includes a tail portion 41 abutting against the biasing member 23, and

a nip 42 protruding outwardly of the nip holder 3. The tail portion 41 is biased by the biasing member 23 to push the nip 42 out of the nip holder 3.

5 The chopstick 5 has a shape of one of a pair of chopsticks, and is connected threadedly to the chopstick engaging thread 253 of the connecting body 21.

10 The fluid seal 6 is mounted between the second thread 254 of the connecting body 21 and the chopstick 5 to prevent liquid from seeping into the space between the connecting body 21 and the chopstick 5.

15 The tubular pen body 7 is a hollow tube, and includes a threaded connecting portion 71 at an open end thereof. The threaded connecting portion 71 can be connected selectively to one of the first thread 244 and the second thread 254 of the connecting body 21 so that the tubular pen body 7 can be connected to the first end portion 24 or the second end portion 25.

20 The cap 8 is used to cover removably the nip holder 3 and the connecting body 21.

25 For use as a writing tool, as shown in Figure 6, the tubular pen body 7 is connected threadedly to the second thread 254 so that the tubular pen body 7 covers the chopstick 5 and exposes the nip holder 3. The nip 42 of the pen core 4 protrudes out of the nip holder 3. As the open end of the tubular pen body 7 is inserted into a gap between the outer tube 211 and the sleeve

255 to engage the second thread 254, the open end of the tubular pen body 7 presses the cone-shaped section 257 of the sleeve 255 moving downward the sleeve 255. The cap 8 (see Figures 4 and 5) is used to cover the
5 nip holder 3 and the connecting body 21 to protect the nip 42.

Referring to Fig. 7, for use as a chopstick, the hollow tubular pen body 7 is first removed from the second thread 254, and is thereafter inverted to cover
10 the nip holder 3 and to connect threadedly to the first thread 244. Therefore, the tubular pen body 7 envelops the outer periphery of the nip holder 3 and exposes the chopstick 5.

With the provision of the biasing member 23 to abut
15 with the tail portion 41 of the pen core 4, positional deviation of the nip holder 3 is permitted by the biasing member 23 when the nip holder 3 is assembled with the connecting body 21. In addition, because the pen core 4 is biased by the biasing member 23 to protrude the
20 nip 42 out of the nip holder 3, the pen core 4 can be fabricated easily with less accurate length. The manufacturing cost can therefore be lowered according to the present invention.

CLAIMS:

1. A combination of pen and chopstick comprising:

a hollow connecting body (21) having opposite first and second end portions (24, 25), said first end portion (24) having a nib holder-engaging thread (243) and a first thread (244), said second end portion (25) having a chopstick engaging thread (253) and a second thread (254);

an extension tube (22) connected to said second end portion (25);

a biasing member (23) disposed in said extension tube (22);

a nib holder (3) connected to said nib holder-engaging thread (243);

a pen core (4) received in said connecting body (21) and said extension tube (22), and including a tail portion (41) abutting against said biasing member (23), and a nib (42) extending into said nib holder (3), said tail portion (41) being biased by said biasing member (23) to push said nib (42) out of said nib holder (3);

a chopstick (5) connected threadedly to said chopstick engaging thread (253); and

a tubular pen body (7) that is selectively connectable to one of said first and second threads (244, 254), said tubular pen body (7) covering said chopstick (5) and exposing said nib holder (3) when being connected threadedly to said second thread (253),

and covering said nip holder (3) and exposing said chopstick (5) when connected threadedly to said first thread (244).

5 2. The combination as claimed in Claim 1, further comprising a fluid seal (6) disposed between said second thread (254) and said chopstick (5).

3. The combination as claimed in Claim 1 further comprising a cap (8) removably covering said nip holder (3) and said connecting body (21).