# 汉风图纹 pgfornament-han v0.3

林莲枝、张晨南

v0.3 2018/04/01 https://github.com/liantze/pgfornament-han

#### 摘要

利用 pgfornament 宏包可以在 LATEX 文件里便捷地画出十分典雅漂亮的、欧式风格的花纹。(详情请自 行访问 http://ctan.org/pkg/pgfornament。)pgfornament-han 宏包的用意,正是为了尝试用 pgfornament 的已有机制,提供一些汉风的传统图纹。所有图纹均由张晨南以 CAD 程式定稿、TikZ 绘制,再由林莲枝 转为适合 pgfornament 机制使用的宏包代码。

# 第一部分 基本用法

n 为图纹编号的话,最简单的用法是 \pgfornamenthan[color=red,width=1.5cm] {n}。也可以用 height 或者 scale 设定大小。注意图纹比例是不变的,因此只有最后给出的选项有效。此外 symmetry 参数可以实现 3 种镜像, v (垂直)、h (水平)、c (中心 = 垂直 + 水平镜像), 画边框的四个角点时很 好用。其它 TikZ 参数的应用:

\tikzset{pgfornamentstyle/.append style={draw=black,fill=red,line width=1}} \pgfornamenthan[scale=2]{n}

以下是一些范例。

#### 文本中的使用

\pgfornamenthan[color=blue,scale=0.18]{56} \pgfornament[scale=0.2]{56}



#### TikZ 选项的应用

\begin{tikzpicture}[baseline={(current bounding box.center)}] \tikzset{pgfornamentstyle/.style={ draw=Goldenrod,fill=Red,line width=1pt}} \node[fill=black,circle,draw=Red,line width=2pt,inner sep=-8pt]

at (0,0) {\pgfornamenthan[scale=0.38]{56}}; \end{tikzpicture}





```
简单的边框范例
\begin{tikzpicture}[x=1pt,y=1pt]
           \tikzset{every node/.append style={inner sep=0pt,color=
                                                                                                                                                                                           }}
           \node (nw) {\pgfornamenthan[scale=0.35]{1}};
           \node[anchor=north west,right=140bp of nw] (ne)
                  {\pgfornamenthan[symmetry=v,scale=0.35]{1}};
           \node[anchor=north west,below=0pt of nw] (sw)
                  {\pgfornamenthan[symmetry=h,scale=0.35]{1}};
           \node[anchor=north east,below=0pt of ne] (se)
                  {\pgfornamenthan[symmetry=c,scale=0.35]{1}};
           %%
                             pgfornmanet
                                                                                    \draw (A) to[ornamenthan=19] (B)
                                                 tikz
                                                                                                                                    \protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\protect\pro
                                                                                                                                                                                                       scale
                  scale
           \node[anchor=south west,xscale=2] at (sw.south east) {\pgfornamenthan[scale=0.35]{29}};
           %%
                                                                    decorations
           \begin{scope} [decoration={markings,
                 mark=between positions 0 and 0.75 step 70bp with
                       { \node[transform shape,anchor=north west]{\pgfornamenthan[scale=0.35]{29}};}
                }]
                 \draw[decorate] (nw.north east) -- (ne.north west);
           \end{scope}
     \node[font=\kaishu,align=center,xshift=70,text=black] at (nw.south east)
              {
                                                                               11
                                                                            11
                                                                                                                                               };
\end{tikzpicture}
                                                   给我一片海棠红啊海棠红
                                                                血一样的海棠红
                                                   沸血的烧漏是乡愁的烧漏
                                                   给我一片海棠红啊海棠红
```

```
另一个简单的边框范例
\begin{tikzpicture}
 \tikzset{every node/.append style={
                                        ,inner sep=Opt}}
 \node (nw) {\pgfornamenthan[scale=0.25]{12}};
 \node[right=50bp of nw] (ne) {\pgfornamenthan[scale=0.25,symmetry=v]{12}};
 \node[below=50bp of nw] (sw) {\pgfornamenthan[scale=0.25,symmetry=h]{12}};
 \node[below=50bp of ne] (se) {\pgfornamenthan[scale=0.25,symmetry=c]{12}};
    scale=0.25
                               50bp
                                                                               rscale
 \node[anchor=north west] at (nw.north east) {\pgfornamenthan[scale=0.25]{32}};
 \node[anchor=south west] at (sw.south east) {\pgfornamenthan[scale=0.25]{32}};
 \node[anchor=south west,rotate=-90] at (nw.south west) {\pgfornamenthan[scale=0.25]{32}};
  \node[anchor=south east,rotate=90] at (ne.south east) {\pgfornamenthan[scale=0.25]{32}};
\node[anchor=center,
                        ,shift={(25bp,-25bp)}] at (nw.south east)
  {\pgfornamenthan[scale=0.5]{57}};
\end{tikzpicture}
```

```
有些部件衔接可能需要手动 shift

\begin{tikzpicture}\tikzset{every node/.append style={ ,inner sep=0pt}}
\node (nw) {\pgfornamenthan[scale=0.2]{23}};
\node[right=53bp of nw] (ne) {\pgfornamenthan[scale=0.2,symmetry=v]{23}};
\node[anchor=north west,xshift=2bp] at (nw.north east) {\pgfornamenthan[scale=0.2]{41}};
\node[anchor=north east,xshift=-2bp] at (ne.north west)
{\pgfornamenthan[scale=0.2,symmetry=v]{41}};
\end{tikzpicture}
```

#### 框着整个页面的代码。很适合拿来设计奖状证书的有木有!

```
\newbox{\fortyseven}
\savebox{\fortyseven}{\pgfornamenthan[scale=0.2,color=
                                                              ]{47}}
\tikzset{every node/.append style={inner sep=0pt,
\begin{tikzpicture}[overlay,remember picture]
\node[anchor=north west, shift={(14.5pt,-14.5pt)}] at (current page.north west)
  (nw) {\pgfornamenthan[scale=0.2]{25}};
\node[anchor=north east,shift={(-14.5pt,-14.5pt)}] at (current page.north east)
  (ne) {\pgfornamenthan[scale=0.2,symmetry=v]{25}};
\node[anchor=south west,shift={(14.5pt,14.5pt)}] at (current page.south west)
  (sw) {\pgfornamenthan[scale=0.2,symmetry=h]{25}};
\node[anchor=south east,shift={(-14.5pt,14.5pt)}] at (current page.south east)
  (se) {\pgfornamenthan[scale=0.2,symmetry=c]{25}};
%
\begin{scope}[start chain,node distance=Opt]
\node[anchor=north west,on chain] at (nw.north east) {\usebox{\fortyseven}};
\foreach \i in \{1, ..., 15\} {
  \node[on chain] {\usebox{\fortyseven}};
}
\end{scope}
\begin{scope}[start chain,node distance=Opt]
\node[anchor=south west,on chain] at (sw.south east) {\usebox{\fortyseven}};
\foreach \i in \{1,...,6\} \node[on chain] \{\usebox{\fortyseven}\};
\end{scope}
%
\begin{scope}[start chain=going left,node distance=0pt]
\node[anchor=south east,on chain] at (se.south west) {\usebox{\fortyseven}};
\foreach \i in \{1,...,6\} \node[on chain] \{\usebox{\fortyseven}\};
\end{scope}
%
%
           chains
                                                     \foreach
               (47)
                         155.
                                   scale = 0.2
\foreach \i in \{0, ..., 21\}
  \node[anchor=south west,rotate=-90,shift={($\i*(31bp,0)$)}] at (nw.south west)
    {\usebox{\fortyseven}};
\foreach \i in \{0, ..., 21\}
  \node[anchor=south east,rotate=90,shift={(\$\i*(-31bp,0)\$)}] at (ne.south east)
    {\usebox{\fortyseven}};
%
                    \fancyfoot
\node[yshift=32pt,
                      ] at (current page.south) {\pgfornamenthan[scale=0.1]{51}};
\node[yshift=32pt,text=black] at (current page.south) {\large\thepage};
\end{tikzpicture}
```

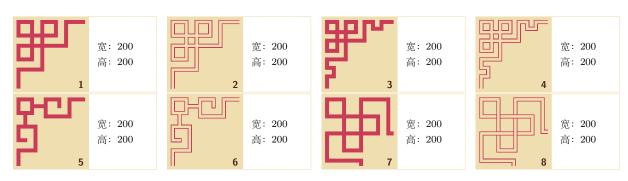
# 第二部分 纹样列表

以下部件的原宽度、原高度皆以 1bp 为单元。

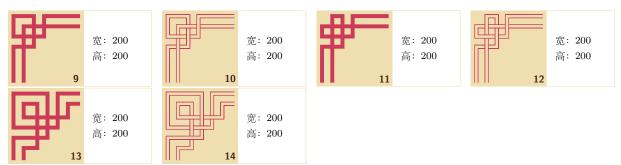
# 1 角点符号

### 1.1 接单线的角点符号

有实心线型与对应的空心线型两种。以下皆同。

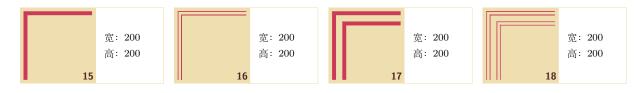


## 1.2 接双线的角点符号



## 1.3 简单角点符号

和其他角点符号配合,在一条对角线上使用其他角点符号,另一条对角线上使用简单角点符号。



# 1.4 回纹的角点符号

和连续的回纹配合。



#### 和离散的回纹配合。



# 2 线型单元

宽: 200

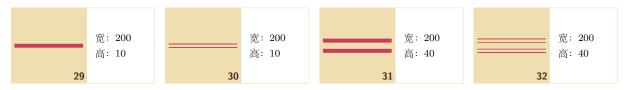
高: 200

宽: 200

高: 200

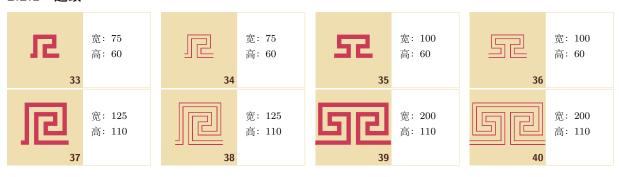
26

### 2.1 单线、双线直线



#### 2.2 回字纹

#### 2.2.1 连续



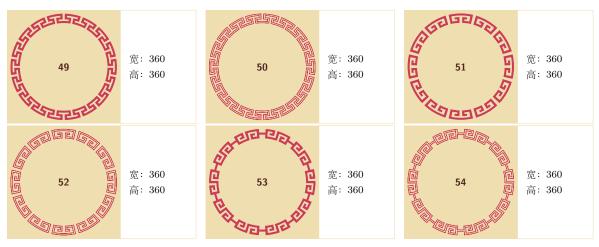
#### 2.2.2 离散



#### 2.2.3 离散连接



### 2.2.4 圆周排布的回纹



# 3 吉祥纹路

## 3.1 福字纹



### 3.2 寿字纹

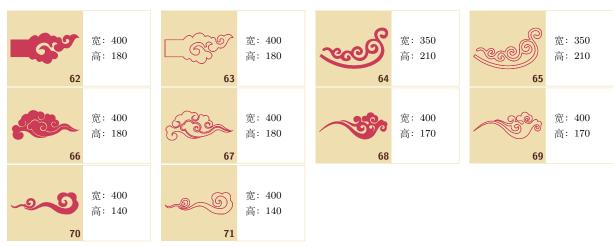


# 4 云纹

# 4.1 对称符号



# 4.2 左右侧符号



# 4.3 角落符号



### 4.4 连接线





