

US0D10893469

(12) United States Design Patent (10) Patent No.:

Houchens

(10) Patent No.: US D1,089,346 S

(45) Date of Patent: ** Aug. 19, 2025

| (54) CASTLE SLU |
|-----------------|
|-----------------|

- (71) Applicant: Robert G. Houchens, LaGrange, KY
- (72) Inventor: **Robert G. Houchens**, LaGrange, KY
- (**) Term: 15 Years
- (21) Appl. No.: 29/906,971
- (22) Filed: Nov. 14, 2023
- (51) LOC (15) Cl. 15-09
- (52) **U.S. Cl.**

USPC **D15/147**; D21/510

(58) Field of Classification Search

USPC D15/122, 138, 147, 199; D21/108, 114, D21/115, 242; D25/7, 16, 59; D34/28, D34/29, 32, 35

CPC B07B 1/02; B07B 1/00; B03B 4/06; B03B 4/065; B03B 5/02; B03B 5/06; B03B 5/26; B03B 5/68; B03B 7/00

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

| 644,994 A | * | 3/1900 | Milan B03B 5/26 |
|---------------------------|---|---------|--|
| | | | 209/458 |
| D44,877 S | * | 11/1913 | Schwarz D25/17 |
| D169,888 S | * | 6/1953 | Beyer 446/476 |
| D206,934 S | * | 2/1967 | Hedu D25/7 |
| D241,871 S | * | 10/1976 | Reiling D21/510 |
| D247,385 S | * | 2/1978 | Rideau D21/405 |
| 4,112,635 A | * | 9/1978 | Rylander A63H 33/008 |
| | | | |
| | | | 217/46 |
| 4,142,965 A | * | 3/1979 | Dolan B03B 5/66 |
| 4,142,965 A | * | 3/1979 | =1 |
| 4,142,965 A D262,902 S | * | 0,10,10 | Dolan B03B 5/66 |
| -,, | * | 0,10,10 | Dolan |
| D262,902 S | * | 2/1982 | Dolan |
| D262,902 S | * | 2/1982 | Dolan B03B 5/66 209/487 Duarte D21/510 Honig B03B 5/26 |

| | | Pope D21/510 Jackson A47D 7/00 | | | | |
|---------------------------|--------|-----------------------------------|--|--|--|--|
| 4,860,874 A * | 8/1989 | 446/478 Winderl B03B 5/26 | | | | |
| D333,328 S * D377,182 S * | | 209/504 Aker | | | | |
| (Continued) | | | | | | |

FOREIGN PATENT DOCUMENTS

RU 1432876 A1 * 1/1995 RU 2160639 C2 * 12/2000

OTHER PUBLICATIONS

https://coldrivermining.com/product/mini-castle-sluice/(Year: 2024).*

Primary Examiner — Patricia A Palasik (74) Attorney, Agent, or Firm — CARRITHERS LAW OFFICE, PLLC; David W. Carrithers

(57) CLAIM

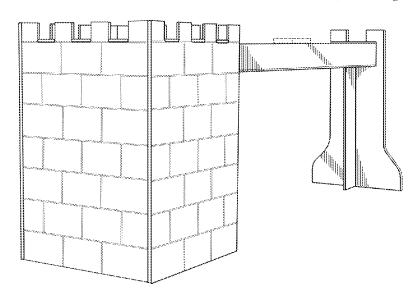
The ornamental design for a castle sluice as shown and described.

DESCRIPTION

- FIG. 1 is a perspective view of a castle sluice showing my new design:
- FIG. 2 is a front view thereof;
- FIG. 3 is a rear view thereof;
- FIG. 4 is a top view thereof;
- FIG. 5 is a bottom view thereof;
- FIG. 6 is a left side view thereof; and,
- FIG. 7 is a right side view thereof.

The broken lines showing the tray in FIG. 3, and the sluice and tray in FIG. 4 are for the purpose of illustrating environmental subject matter and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



US D1,089,346 S Page 2

(56) **References Cited**

U.S. PATENT DOCUMENTS

| 6,308,835 | B1* | 10/2001 | Wade B01D 21/0015 |
|--------------|------|---------|--------------------------|
| | | | 209/636 |
| 6,802,160 | B2 * | 10/2004 | Harambasic E04B 1/04 |
| | | | 446/124 |
| D544,926 | S * | 6/2007 | Kassens D21/506 |
| D631,105 | S * | 1/2011 | Cohen D6/337 |
| D768,745 | S * | 10/2016 | Vetter D15/147 |
| 9,644,338 | B1 * | 5/2017 | Bisson E02D 27/50 |
| D805,914 | S * | 12/2017 | Jackman D9/636 |
| D807,608 | S * | 1/2018 | Katz D34/28 |
| D818,510 | S * | 5/2018 | Bell D15/147 |
| D935,881 | S * | 11/2021 | Saeyens D9/636 |
| 11,229,191 | B2 * | 1/2022 | Nail A01K 63/006 |
| 2007/0151523 | A1* | 7/2007 | Suteerawanit A01K 63/003 |
| | | | 119/253 |
| 2016/0023219 | A1* | 1/2016 | Mundhra B03B 5/26 |
| | | | 209/18 |
| | | | |

^{*} cited by examiner

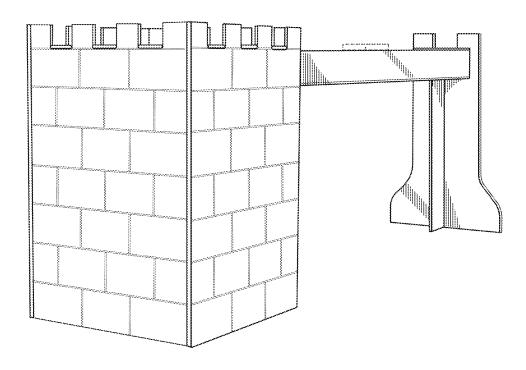


FIG. 1

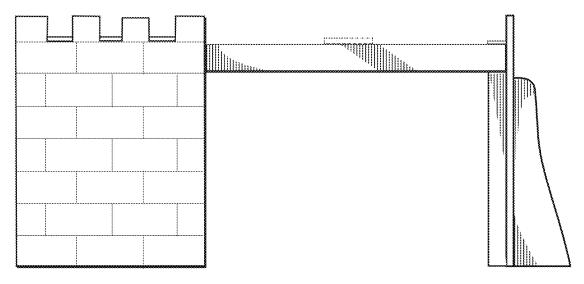


FIG. 2

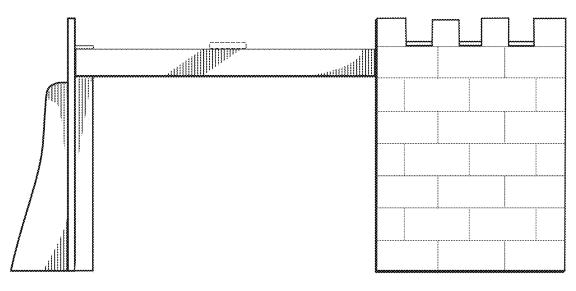


FIG. 3

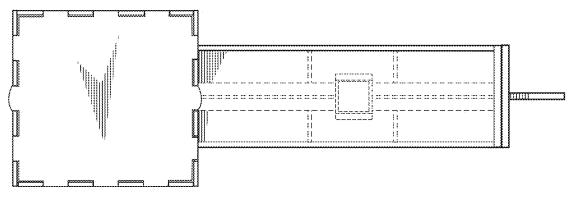


FIG. 4

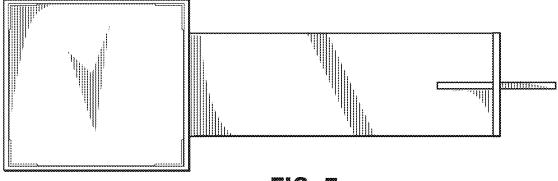


FIG. 5

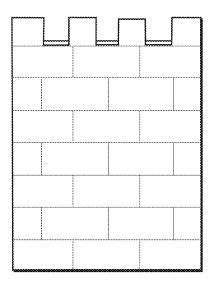


FIG. 6

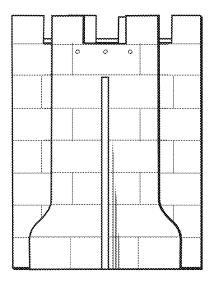


FIG. 7